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(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES  
THERE TO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

WO 02/061087 A2

**ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS  
(GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH  
ANTIGENIC PEPTIDES**

**5 CROSS-REFERENCE TO RELATED APPLICATIONS**

**[1]** The present application claims priority from United States provisional patent application No. 60/257,144, filed December 19, 2000 and presently pending.

**TABLE OF CONTENTS**

**[2]** The following is a Table of Contents to assist review of the present application:

**10 CROSS-REFERENCE TO RELATED APPLICATIONS**

**TABLE OF CONTENTS**

**BACKGROUND**

**SUMMARY**

**BRIEF DESCRIPTION OF THE DRAWING**

**15 DETAILED DESCRIPTION**

**A. INTRODUCTION AND OVERVIEW**

**B. DEFINITIONS**

**C. SELECTION OF DESIRED ANTIGENIC PEPTIDES FOR GPCRS AND  
OTHER POLYPEPTIDES**

**20 D. GENERAL DISCUSSION OF ANTIGENIC PEPTIDES RELATED TO  
PARTICULAR GPCRS**

**ANTIGENIC PEPTIDES GENERALLY:**

**EXPRESSION PROFILES BASED ON PROTEINS:**

**SCREENING FOR ACTIVITY:**

**25 PROTEIN PURIFICATION:**

**E. CERTAIN ASSAYS, ANTIBODIES, PROBES, THERAPEUTICS, AND  
OTHER SYSTEMS AND ASPECTS, OF THE INVENTION**

**1. SYSTEMS AND METHODS FOR SCREENING FOR A  
PARTICULAR GPCR OR ANTIGENIC PEPTIDE**

**30 SCREENING FOR ANTIGENIC PEPTIDES:**

**SCREENING FOR/WITH ANTIGENIC PEPTIDES:**

**LIST OF ASSAYS:**

**ENZYME-LINKED IMMUNOSORBENT ASSAYS (ELISA):**

**IMMUNOFLUORESCENCE ASSAY:**

**35 BEAD AGGLUTINATION ASSAYS:**

**ENZYME IMMUNOASSAYS:**

**SANDWICH ASSAY:**

**SEQUENTIAL AND SIMULTANEOUS ASSAYS:**

**IMMUNOSTICK (DIP-STICK) ASSAYS:**

**40 IMMUNOCHROMATOGRAPHIC ASSAYS:**

**IMMUNOFILTRATION ASSAYS:**

**BIOSENSOR ASSAYS:**

## 2. ANTIBODIES

ANTIBODIES GENERATED AGAINST A PARTICULAR ANTIGENIC PEPTIDE  
AND ITS CORRESPONDING GPCR:

ANTIBODIES GENERALLY:

5 ANTI-IDIOTYPIC ANTIBODIES:

### a. Antibody Preparation

#### (i) Polyclonal Antibodies

ANTIBODY PREP - POLYCLONAL:

ANTIBODY PREP - ADJUVANTS (ALL ABS):

10 (ii) Monoclonal Antibodies

ANTIBODY PREP - MONOCLONAL:

MOABS - COMBINATORIAL:

HUMANIZED MOAB:

15 ANTIBODY SUBSTITUTIONS - NON-IMMUNOGLOBULIN POLYPEPTIDES  
(ALL ABS):

CHIMERICS:

ANTIBODY LABELING (ALL ABS):

#### (iii) Humanized And Human Antibodies

HUMANIZED AB GENERALLY:

20 (iv) Antibody Fragments

ANTIBODY FRAGMENTS:

#### (v) Bispecific Antibodies

BISPECIFIC ANTIBODIES GENERALLY:

ANTIBODIES - HYBRID IMMUNOGLOBULIN HEAVY CHAIN:

25 ANTIBODIES - CROSS-LINKED OR "HETEROCONJUGATE":

ANTIBODIES - DIABODIES:

ANTIBODIES - OTHER:

### b. Antibody Purification

ANTIBODY PURIFICATION GENERALLY:

30 BEFORE LPHIC:

LPHIC:

POST LPHIC:

### c. Some Uses For Antibodies Described Herein

#### (i) Generally

35 GENERALLY:

ASSAYS:

DIAGNOSTIC USES:

#### (ii) Assays

ASSAYS:

40 COMPETITIVE BINDING ASSAYS:

#### (iii) Affinity Purification

AFFINITY PURIFICATION:

#### (iv) Therapeutics

THERAPEUTIC USES:

45 THERAPEUTIC FORMULATIONS:

THERAPEUTIC FORMULATIONS -STERILE:

THERAPEUTIC ADMINISTRATIONS:

THERAPEUTIC ADMINISTRATIONS – SUSTAINED RELEASE-POLYMERS:  
THERAPEUTIC ADMINISTRATIONS – SUSTAINED RELEASE-LIPOSOMES:  
THERAPEUTICALLY EFFECTIVE AMOUNT:

5 5. DRUG DESIGN BASED ON THE ANTIGENS HEREIN OR  
ANTIBODIES THERETO

DISEASE/CONDITIONS LIST:

EXAMPLES

SEQUENCE LISTING:

CLAIMS

10 ABSTRACT

[3]

## BACKGROUND

[4] G protein-coupled receptors (GPCRs) are a large group of proteins that transmit signals across cell membranes. In general terms, GPCRs function somewhat like doorbells.

15 When a molecule outside the cell contacts the GPCR (pushes the doorbell), the GPCR changes its shape and activates "G proteins" inside the cell (similar to the doorbell causing the bell to ring inside the house, which in turn causes people inside to answer the door). GPCRs are like high-security doorbells because each GPCR responds to only one specific kind of signaling molecule (called its "endogenous ligand"), kind of like a high-tech door

20 lock that responds to only one fingerprint. Part of the GPCR is located outside the cell (the "extracellular domain"), part spans the cell's membrane (the "transmembrane domain"), and part is located inside the cell (the "intracellular domain"). Thus, GPCRs are embedded in the outer membrane of a cell and recognize and bind certain signaling molecules that are present in the spaces surrounding the cell. GPCRs are used by cells to keep an eye on the cells' own

25 activity and on the environment. In organisms that have many cells, the cells use GPCRs to talk to each other.

[5] GPCRs are important to the pharmaceutical industry and other industries. For example, many drugs, including some antibody-based drugs, act by binding to specific GPCRs and initiating or inhibiting their intracellular actions, and diagnostics and therapeutics

30 based on GPCRs or on antibodies for GPCRs are becoming increasingly important.

[6] General concepts about GPCRs are discussed in more scientific terms in the following paragraphs.

[7] The GPCR superfamily has at least 250 members, Strader et al., FASEB J., 9:745-754 (1995); Strader et al., Annu. Rev. Biochem., 63:101-32 (1994). GPCRs play important



roles in diverse cellular processes including cell proliferation and differentiation, leukocyte migration in response to inflammation, gene transcription, vision (the rhodopsins), smell (the olfactory receptors), neurotransmission (muscarinic acetylcholine, dopamine, and adrenergic receptors), and hormonal response (luteinizing hormone and thyroid-stimulating hormone receptors). Strader et al., *supra*; U.S. Patent nos. 5,994,097 and 6,063,596. Many important drugs produce their therapeutic actions through their interaction with GPCRs.

[8] Nucleotide and amino acid sequences for many GPCRs have been reported and can be found in public databases such as GenBank and GenPept. Generally speaking, different GPCRs show both structural and sequence similarities. The most conserved domains of GPCRs are the transmembrane domains and the first two cytoplasmic loops. GPCRs range in size from under 400 to over 1000 amino acids. Coughlin, S. R., *Curr. Opin. Cell Biol.* 6:191-197 (1994). They contain seven hydrophobic transmembrane regions that span the cellular membrane and form a bundle of antiparallel alpha helices. McKee K.K., *supra*. The bundle of helices forming the transmembrane regions provide many structural and functional features of the receptor. In most cases, the bundle of helices form a pocket that binds a signaling molecule. However, when the binding site accommodates larger molecules, the extracellular N-terminal segment or one or more of the three extracellular loops participate in binding and in subsequent induction of conformational change in the intracellular portions of the receptor. These helices are joined at their ends by three intracellular and three extracellular loops. GPCRs also contain cysteine disulfide bridges between the second and third extracellular loops, an extracellular N-terminus, and a cytoplasmic or intracellular C-terminus. The N-terminus is often glycosylated, while the C-terminus is generally phosphorylated. A conserved, acidic-Arg-aromatic triplet present in the second cytoplasmic loop may interact with G Proteins. Most GPCRs contain a characteristic consensus pattern. Watson, S. and S. Arkinstall, *The G protein Linked Receptor Facts Book*, Academic Press, San Diego, CA (1994); Bolander, F. F. *Molecular Endocrinology*, Academic Press, San Diego, CA (1994).

[9] Although GPCRs have many features in common, each GPCR has its own unique characteristics as well. GPCRs have varying nucleotide and amino acid sequences, and varying antigenicity. GPCRs bind a diverse array of specific, extracellular signaling molecules (which can also be referred to as "ligands") including peptides, cytokines, hormones, neurotransmitters, growth factors, and specialized stimuli such as photons,

flavorants, and odorants. Identified ligands include, for example, purines, nucleotides (*e.g.*, adenosine, cAMP, NTPs), biogenic amines (*e.g.*, epinephrine, norepinephrine, dopamine, histamine, noradrenaline, serotonin), acetylcholine, peptides (*e.g.*, angiotensin, calcitonin, chemokines, corticotropin releasing factor, galanin, growth hormone releasing hormone, gastric inhibitory peptide, glucagon, neuropeptide Y, neurotensin, opioids, thrombin, secretin, somatostatin, thyrotropin releasing hormone, vasopressin, vasoactive intestinal peptide), lipids and lipid-based compounds (*e.g.*, cannabinoids, platelet activating factor), excitatory and inhibitory amino acids (*e.g.*, glutamate, GABA), ions (*e.g.*, calcium), and toxins.

[10] In general, a GPCR binds only one type of signaling molecule and GPCRs are classified according to subfamilies based upon their selectivity and specificity for a particular ligand. When the ligand for a receptor is not known, the receptor is known as an orphan receptor. The extracellular domain interacts with or binds to certain signaling molecules or ligands located outside of the cell. The binding of a ligand to the extracellular domain alters the conformation of the receptor's intracellular domain causing the activation of a G protein. The G protein then activates or inactivates a separate plasma-membrane-bound enzyme or ion channel. This chain of events alters the concentration of one or more intracellular messengers (second messengers) such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or  $\text{Ca}^{2+}$ . These, in turn, alter the activity of other intracellular proteins such as cAMP-dependent protein kinase and  $\text{Ca}^{2+}$ /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal. Baldwin, J.M., Curr. Opin. Cell Biol. 6:180-190 (1994). The G protein is deactivated by hydrolysis of GTP by GTPase. U.S. Patent Nos. 5,994,097 and 6,063,596.

[11] GPCR mutations, both of the loss-of-function and of the activating variety, have been associated with numerous human diseases, Coughlin, *supra*. For example, retinitis pigmentosa may arise from either loss-of-function or activating mutations in the rhodopsin gene. Somatic activating mutations in the thyrotropin receptor cause hyperfunctioning thyroid adenomas, Parma, J. et al., Nature 365:649-651 (1993). Parma et al. indicate that it may be possible that certain G protein-coupled receptors susceptible to constitutive activation may behave as proto-oncogenes. Interestingly, GPCRs have functional homologues in human cytomegalovirus and herpesvirus, so GPCRs may have been acquired during evolution for viral pathogenesis, Strader et al., FASEB J., 9:745-754 (1995); Arvanitakis et al., Nature, 385:347-350 (1997); Murphy, Annu. Rev. Immunol. 12:593-633 (1994). The

importance of the GPCR superfamily is further highlighted by the recent discoveries that some of its family members, the chemokine receptors CXCR4/Fusin and CCR5, are co-receptors for T cell-tropic and macrophage-tropic HIV virus strains, respectively, Alkhatib et al., *Science*, 272:1955 (1996); Choe et al., *Cell*, 85:1135 (1996); Deng et al., *Nature*, 381:661 (1996); Doranz et al., *Cell*, 85:1149 (1996); Dragic et al., *Nature*, 381:667 (1996); Feng et al., *Science*, 272:872 (1996). It is conceivable that blocking these receptors may prevent infection by the human immunodeficiency (HIV) virus. Other GPCR-related items include regulating cellular metabolism and diagnosing, treating and preventing particular diseases associated with particular GPCRs.

10 [12] One important way to evaluate GPCRs and antibodies for GPCRs as novel drug targets and for other purposes such as diagnostics is through the creation and use of databases. Such databases can provide large amounts of information about genes, proteins, and other biological matter. An excellent example of such a database is the GPCR database created and maintained by LifeSpan BioSciences, Inc., Seattle, Washington, USA, which  
15 database is available by subscription to researchers and others needing such information. The information in the databases can, for example, be searched, compared, and analyzed. The compilation of such databases, as well as the searching, comparing, etc., of the databases, can be referred to as the field of "bioinformatics." Investigations largely related to genes, such as the information found from the sequencing of the human genome, can be called "genomics"  
20 while similar activities on proteins can be called "proteomics."

[13] There has gone unmet a need for improved systems, compositions, methods, and the like relating to improved antigenicity of peptides from GPCRs and antibodies relating thereto. The present invention provides these and other advantages.

#### SUMMARY

25 [14] The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention  
30 provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known

antibodies. The present invention also provides improved methods of selecting antigenic peptides from any desired protein or polypeptide, as well as antigenic peptides so produced and antibodies against such antigenic peptides.

[15] The antigenic peptides and antibodies herein can be used, for example, to detect the presence or absence of corresponding GPCRs. They can be used to diagnose a variety of diseases and disorders in which GPCRs are involved, such as, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[16] The association of particular GPCRs with particular diseases, disorders or conditions will be apparent to a person of ordinary skill in the art in view of the present application, and thus the association with the antibodies of the present invention to the corresponding diseases, disorders or conditions.

5 [17] Thus, in one aspect the present invention provides isolated antigenic peptides according to any one of SEQ ID NOS. 692-2292. The isolated antigenic peptides also comprise an amino acid sequences that are at least about 90% or 95% identical to such sequences, or be an analog of such sequences, or comprise a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids set forth in any one of such  
10 sequences or contain no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any of such sequences. The present invention also provides antibodies, particularly isolated antibody having high specificity and high affinity or avidity for a particular GPCR or other target polypeptide or protein, generated using the antigenic peptides discussed herein.

15 [18] The present invention also provides isolated nucleic acid molecules encoding an antigenic peptide or antibody as described herein. The molecule can encode a naturally occurring human antigenic peptide. In some embodiments, the present invention provides processes for producing an isolated polynucleotide can comprise hybridizing a nucleotide encoding an antigenic peptide as discussed herein to DNA such as genomic DNA under  
20 stringent or highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

[19] The present invention also provides kits and assays, such as kits for the detection of antibodies against a particular GPCR or other target polypeptide in a sample comprising: a) an isolated antigenic peptide as discussed herein and derived from the particular GPCR, and  
25 b) at least one of a reagent or a device for detecting the antibodies, or comprising: a) an isolated antibody as described herein, and b) at least one of a reagent or a device for detecting the antibody. The assays include detection of a particular GPCR in a sample, comprising: a) providing an isolated antigenic peptide, b) contacting the isolated antigenic peptide corresponding to the particular GPCR with the sample under conditions suitable and for a  
30 time sufficient for the antigenic peptide to bind to one or more antibodies specific for the target protein present in the sample, to provide an antibody-bound target protein, and c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the

sample contains the particular GPCR. The assays can further comprise the step of binding the isolated antigenic peptide or the antibody to a solid substrate, and the sample can be an unpurified sample, for example from a human being.

[20] The assay can be selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

10 [21] In other aspects, the present invention provides methods of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence such as a polypeptide or protein wherein the antigenic peptide has a length of about 5 to about 100 amino acids, typically 6 amino acids to about 50 amino acids, and preferably 7 amino acids to about 20 amino acids. The methods comprise: a) searching the candidate polypeptide  
15 sequence using a comparison window of the length, and b) selecting against amino acid sequences of the length and having at least 1 to 3 or 4 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8)  
20 tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, the method comprises selecting against at least 5 to all of the characteristics.

[22] The methods can comprise, independently or in addition, selecting against amino acid sequences of the desired length having at least one of the following characteristics 1) sequences having at least 5 consecutive amino acids that are identical to an alternative amino  
25 acid sequence from an alternative polypeptide that can be different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences. The posttranslational modification sites can be phosphorylation or glycosylation sites. The methods can also comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

30 [23] These and other aspects, features, and embodiments are set forth within this application, including the following Detailed Description and attached drawings. The present invention comprises a variety of aspects, features, and embodiments; such multiple aspects,

features, and embodiments can be combined and permuted in any desired manner. In addition, various references are set forth herein, including in the Cross-Reference To Related Applications, that discuss certain compositions, apparatus, methods, or other information; all such references are incorporated herein by reference in their entirety and for all their teachings and disclosures, regardless of where the references may appear in this application.

#### BRIEF DESCRIPTION OF THE DRAWING

- [24] Figure 1 depicts representative examples of the nucleotide and amino acid sequences of the GPCRs for which antigenic peptides are set forth herein, SEQ ID NOS. 1 - 691.
- 10 [25] Figure 2 depicts amino acid sequences for the antigenic peptides for the GPCRs herein, SEQ ID NOS. 692-2292.
- [26] Figure 3 depicts a listing of GPCRS for which commercially available antibodies are putatively available.

#### DETAILED DESCRIPTION

##### 15 A. INTRODUCTION AND OVERVIEW

[27] Diseases such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases are serious health problems in the modern world. Any improvement in the diagnosis, treatment or other remediation of such diseases is a significant advance for millions of people. The present invention provides methods of identifying and selecting desirable antigenic peptides for GPCRs and other desired target or candidate proteins and polypeptides. The present invention also provides the antigenic peptides themselves, as well as antibodies against the antigenic peptides (and against proteins or polypeptides containing such antigenic peptides), and related diagnostics, antibody-based therapeutics directed to certain diseases and conditions, and other helpful compositions, systems, kits, assays and the like. The compositions, methods, and the like can be useful, for example, as agonists, antagonists, probes, and otherwise as may be desired.

[28] The antigenic peptides have been carefully selected using specific selection criteria and methodologies set forth herein to take advantage of particularly advantageous regions of the GPCRs from which they have been derived to provide unusually specific and

immunogenic antigens. These antigenic peptides are particularly useful for producing highly specific antibodies against the antigenic peptides, which, in turn, also means antibodies that are highly specific for the corresponding GPCRs containing the antigenic peptides. Accordingly, the antigenic peptides of the present invention, and the antibodies produced  
5 therefrom, are particularly useful for high specificity, low noise diagnostics and, in the case of the antibodies, for certain antibody-based therapeutics, as well as methods, kits, systems, and the like incorporating or based on such antigenic peptides or antibodies.

[29] The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can  
10 selectively detect the corresponding GPCR in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected.

15 [30] The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole, preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

[31] Figure 1 sets forth the DNA and protein sequences for the GPCRs from which the  
20 antigenic peptides of the present invention were derived SEQ ID NOS. 1-691. Figure 2 sets forth the amino acid sequences of exemplary antigenic peptides, SEQ ID NOS. 692-2292. The sequences in Figures 1 and 2 are listed according to SEQ ID NO and LSID, which is an identification number assigned to the given sequence in the LifeSpan Biosciences databases. The sequences in Figure 2 also include an identifier LPID, which is also an identification  
25 number assigned to the given sequence in the LifeSpan Biosciences databases. Figure 3 depicts GPCRs for which it has been reported that antibodies are commercially available, SEQ ID NOS. 1, 3, 5, 11, 13, 15, 21, 23, 25, 27, 29, 31, 35, 37, 39, 41, 43, 45, 49, 51, 53, 57, 59, 61, 63, 65, 67, 69, 70, 71, 73, 75, 77, 79, 83, 85, 97, 99, 101, 103, 105, 107, 113, 115, 117, 121, 125, 135, 139, 143, 145, 147, 151, 155, 157, 159, 161, 169, 171, 173, 175, 177,  
30 183, 185, 187, 189, 191, 192, 194, 200, 202, 206, 208, 214, 216, 218, 228, 236, 238, 240, 248, 250, 264, 295, 299, 301, 305, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 347, 349, 351, 361, 365, 367, 369, 371, 377, 379, 385, 387, 389, 391, 397,



423, 435, 439, 457, 459, 461, 462, 468, 470, 472, 503, 507, 515, 535, 537, 546, 548, 552, 562, 628, 636; Applicants do not represent that any of the antibodies in Figure 3 that such antibodies are actually commercially available nor that they have any significant specificity nor affinity for the GPCRs reported. For GPCRs for which no antigens or antibodies were previously known, the present invention provides valuable antigenic peptides and antibodies (see, e.g., SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.); for GPCRs for which antigens or antibodies are known, the present invention provides improved antigens in the form of antigenic peptides and improved antibodies (see, e.g., SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, which are antigenic peptides derived from GPCRs for which antibodies are reportedly commercially available). The antigenic peptides and antibodies, and uses and assays, etc., related to the antigenic peptides, are discussed further below.

[32] The discussion herein, including the following passages, has been separated by headings for convenience. The disclosure under a given heading is not restricted to that heading. For example, the discussion in the definitions section is a part of the disclosure of the invention, the discussion on antigenic peptides also contains discussion related to probes and diagnostics, and the discussion on antibodies contains discussion related to therapeutic compositions, etc.

## B. DEFINITIONS

[33] The following paragraphs provide a non-exhaustive list of definitions of some of the terms and phrases as used herein. All terms used herein, including those specifically described below in this section, are used in accordance with their ordinary meanings unless the context or definition indicates otherwise. Also unless indicated otherwise, except within

the claims, the use of "or" includes "and" and vice-versa. Non-limiting terms are not to be construed as limiting unless expressly stated (for example, "including" means "including without limitation" unless expressly stated otherwise).

[34] The terms set forth in this application are not to be interpreted in the claims as indicating a "means plus function" relationship unless the word "means" is specifically recited in a claim, and are to be interpreted in the claims as indicating a "means plus function" relationship where the word "means" is specifically recited in a claim. Similarly, the terms set forth in this application are not to be interpreted in method or process claims as indicating a "step plus function" relationship unless the word "step" is specifically recited in the claims, and are to be interpreted in the claims as indicating a "step plus function" relationship where the word "step" is specifically recited in a claim.

[35] "Agonist" indicates a substance, such as a molecule or compound, that interacts with a particular GPCR, for example by binding to the GPCR, to activate, increase, or prolong the amount or the duration of the effect of the biological activity or functionality of the GPCR. Agonists include proteins, nucleic acids, carbohydrates, or any other molecules that bind to and positively modulate the effect of the GPCR. Agonists and other modulators of the particular GPCR can be identified using *in vitro* or *in vivo* assays for G protein-coupled receptor expression or G protein-mediated signaling. For example, assays for agonists and other modulators include expressing a particular GPCR in cells or cell membranes, applying putative modulator compounds in the presence or absence of a specific known or putative ligand and then determining the functional effects on the particular GPCR-mediated signaling. Samples or assays comprising a particular GPCR that are treated with a potential agonist or other modulator are compared to control samples without the agonist or other modulator to examine the extent of modulation. Control samples can be assigned a relative activity value for the particular GPCR of 100%. Agonist activity on a particular GPCR is achieved when the G protein-coupled receptor activity value relative to the control is at least about 110%, optionally about 150%, preferably about 200-500%, or about 1000-3000% or higher. Down-modulation (for example by an antagonist) of a particular GPCR is achieved when the particular GPCR activity value relative to the control is at most about 90%, typically about 80%, optionally about 50% or about 25-0% of the 100% value.

[36] "Aggregate," see Complex.

[37] "Algorithm" refers to a detailed sequence of actions to perform to accomplish some task. In computer programming, refers to instructions given to the computer.

[38] "Allele" or "allelic sequence" indicates an alternative form of the gene encoding the GPCR. Alleles may result from at least one mutation in the nucleic acid sequence and may result in altered mRNAs or in polypeptides whose structure or function may or may not be altered. Any given natural or recombinant gene may have none, one, or many allelic forms. Common mutational changes that give rise to alleles are generally ascribed to natural deletions, additions, or substitutions of nucleotides. Each of these types of changes may occur alone or in combination with the others, one or more times in a given sequence.

[39] "Altered" nucleic acid sequences encoding the GPCR include those sequences with deletions, insertions, or substitutions of different nucleotides, resulting in a polynucleotide encoding the same GPCR or a polypeptide variant with at least one substantial structural or functional characteristic of the GPCR. Included within this definition are polymorphisms that may or may not be readily detectable using a particular oligonucleotide probe against the polynucleotide encoding the GPCR. "Altered" proteins may contain deletions, insertions, or substitutions of amino acid residues that produce a silent change and result in a functionally equivalent GPCR. Deliberate amino acid substitutions may be made on the basis of similarity in polarity, charge, solubility, hydrophobicity, hydrophilicity, or the amphipathic nature of the residues, as long as the biological or immunological activity of the GPCR is retained. For example, negatively charged amino acids may include aspartic acid and glutamic acid, positively charged amino acids may include lysine and arginine, and amino acids with uncharged polar head groups having similar hydrophilicity values may include leucine, isoleucine, and valine; glycine and alanine; asparagine and glutamine; serine and threonine; and phenylalanine and tyrosine.

[40] "Alternative splicing" refers to different ways of cutting and assembling exons to produce mature mRNAs.

[41] "Amino acid" refers generally to any of a class of organic compounds that contains at least one amino group,  $-NH_2$ , and one carboxyl group,  $-COOH$ . The alpha-amino acids,  $RCH(NH_2)COOH$ , are the building blocks from which proteins are typically constructed.

Amino acid can also refer to artificial chemical analogues or mimetics of a given amino acid as described, depending on the context.

[42] "Amino acid sequence" refers to a string of amino acids, such as an oligopeptide, peptide, polypeptide, or protein sequence, or a fragment of any of these, including naturally occurring or synthetic molecules and those comprising an artificial chemical analogue or mimetic of a given amino acid. In this context, "biologically active fragments," "biologically functional fragments," "immunogenic fragments," and "antigenic fragments" refer to fragments of the GPCR that are preferably about 15, 25, or 50 or more amino acids in length and that retain a substantial amount of such activity of the GPCR. Where "amino acid sequence" refers to an amino acid sequence of a naturally occurring protein molecule, "amino acid sequence" and like terms are not necessarily limited to the complete native amino acid sequence associated with the recited protein molecule.

[43] "Amplification" indicates the production of additional copies of something, such as a nucleic acid sequence. Amplification can be generally carried out using polymerase chain reaction (PCR) technologies or other technologies such as the cycling probe reaction (CPR) that are well known in the art. *See, e.g.*, Dieffenbach, C. W. and G. S. Dveksler, PCR Primer, a Laboratory Manual, pp.1-5, Cold Spring Harbor Press, Plainview, N.Y. (1995); U.S. Patents Nos. 5,660,988, 5,731,146 and 6,136,533.

[44] "Amplification primers" are oligonucleotides such as natural, analog or artificially created nucleotides that can serve as the basis for the amplification of a selected nucleic acid sequence. They include, for example, both PCR primers and ligase chain reaction oligonucleotides.

[45] "Analog" or "variant" indicates a GPCR or antigenic peptide that has been modified by deletion, addition, modification, or substitution of one or more amino acid residues compared to the wild-type sequence. Analogs encompass allelic and polymorphic variants, and also muteins and fusion proteins that comprise all or a significant part of such GPCR, *e.g.*, covalently linked via side-chain group or terminal residue to a different protein, polypeptide, or moiety (fusion partner). Variants of a particular GPCR protein refer to an amino acid sequence that is altered by one or more amino acids, for example by one or more amino acid substitution, insertion, deletion or modification, or proteins with or without associated native-pattern glycosylation. The variant may have "conservative" changes. Such "conservative" changes generally are well known in the art and readily determinable for a particular GPCR in view of the present application. Conservative changes include, for example, substitutions where a substituted amino acid has similar structural or chemical

properties to the amino acid it replaced (e.g., negatively charged amino acids include aspartic acid and glutamic acid; positively charged amino acids include lysine, arginine, histidine, asparagine, and glutamine; amino acids containing sulfur include methionine and cysteine; polar hydroxy amino acids include serine, threonine, and tyrosine; large hydrophobic amino acids include phenylalanine and tryptophan; small hydrophobic amino acids include alanine, leucine, isoleucine, and valine). A variant may also have "**nonconservative**" changes which means that the replacement amino acid provides some substantial change in the amino sequence.

[46] A variant preferably retains at least about 90% identity, and more preferably at least about 95% identity. Within certain embodiments, such variants contain alterations such that the ability of the variant to induce an immunogenic response is not substantially eliminated; in some embodiments the ability to an immunogenic response is not substantially diminished. Modifications of amino acid residues may include but are not limited to aliphatic esters or amides of the carboxyl terminus or of residues containing carboxyl side chains, O-acyl derivatives of hydroxyl group-containing residues, and N-acyl derivatives of the amino-terminal amino acid or amino-group containing residues, e.g., lysine or arginine. Guidance in determining which and how many amino acid residues may be substituted, inserted, deleted or modified without diminishing immunological or biological activity may be found in view of the present application using any of a variety of methods and computer programs known in the art, for example, DNASTAR software. Properties of a variant may generally be evaluated by assaying the reactivity of the variant with, for example, antibodies as described herein or evaluating a biological activity characteristic of the native protein as described herein or as known in the art in view of the present application. Certain polynucleotide variants are capable of hybridizing under appropriately stringent conditions to a naturally occurring DNA sequence encoding a particular GPCR protein (or a complementary sequence). Such hybridizing nucleic acid sequences are also within the scope of this invention.

[47] "**Antagonist**" refers to a molecule which interacts with a particular GPCR, for example by binding to the particular GPCR, and prevents, inactivates, decreases or shortens the amount or the duration of the effect of the biological activity of the GPCR. Antagonists include proteins, nucleic acids, carbohydrates, antibodies, or any other molecules that so affect the GPCR. Antagonists can be identified, for example, using appropriate screens

corresponding to those described for agonists above and elsewhere herein or as would be apparent to those skilled in the art in view of the present application.

[48] "Antibody" indicates one type of binding partner, typically encoded by an immunoglobulin gene or immunoglobulin genes, and refers to, for example, intact  
5 monoclonal antibodies (including agonist and antagonist antibodies), polyclonal antibodies, phage display antibodies, and multispecific antibodies (*e.g.*, bispecific antibodies) formed, for example, from at least two intact antibodies. Antibody also refers to fragments thereof, which comprise a portion of an intact antibody, generally the antigen-binding or variable region of the intact antibody that are capable of binding the epitopic determinant. Examples  
10 of antibody fragments include Fab, Fab', F(ab')<sub>2</sub>, and Fv fragments, diabodies, linear antibodies, single-chain antibody molecules, and multispecific antibodies formed from antibody fragments. *See* US Patent No. 6,214,984. Antibody fragments may be synthesized by digestion of an intact antibody or synthesized *de novo* either chemically or utilizing recombinant DNA technology. Antibodies according to the present invention have at least  
15 one of adequate specificity, affinity and capacity to perform the activities desired for the antibodies. Antibodies can, for example, be monoclonal, polyclonal, or combinatorial. Antibodies that bind GPCR polypeptides can be prepared using intact polypeptides or using fragments containing small peptides of interest as the immunizing antigen. The polypeptide or oligopeptide used to immunize an animal (*e.g.*, a mouse, a rat, or a rabbit) can be derived  
20 from the translation of RNA, or synthesized chemically, and can be conjugated to a carrier protein if desired. Commonly used carriers that are chemically coupled to peptides include bovine serum albumin, thyroglobulin, and keyhole limpet hemocyanin (KLH). The coupled peptide is then used to immunize the animal.

[49] "Antigenic determinant" refers to the antigen recognition site on an antigen (*i.e.*,  
25 epitope). Such antigenic determinant may also be immunogenic.

[50] "Antisense" refers to any composition containing a nucleic acid sequence that is complementary to a specific nucleic acid sequence. "Antisense strand" refers to a nucleic acid strand that is complementary to the "sense" strand. Antisense molecules may be produced by any method including transcription or synthesis including synthesis by ligating  
30 the gene(s) of interest in a reverse orientation to a desired promoter that permits the synthesis of a complementary strand. Once introduced into a cell, the complementary nucleotides can combine with natural sequences produced by the cell to form duplexes and to block either

transcription or translation. The designation "negative" can refer to the antisense strand, and the designation "positive" can refer to the sense strand.

[51] "Biologically active" or "biologically functional," when referring to an antigenic peptide, indicates that the antigenic peptide induces an immunogenic response specific for the antigenic peptide and thus for the GPCR from which it was obtained. A variant, fragment, etc., of an antigenic peptide is "biologically active" or "biologically functional" if the ability to induce the specific immunogenic response is not substantially diminished. The term "not substantially diminished" means retaining a functionality that is at least about 90% of the functionality of the native antigenic peptide. Appropriate assays designed to evaluate such functionality may be designed based on existing assays known in the art in view of the present application, or on the representative assays provided herein.

[52] "Annotation" refers to the provision of helpful or identifying information about a GPCR or other open reading frame (ORF), such as locus name, key words, and Medline references.

[53] "BLAST" refers to the Basic Local Alignment Search Tool, which is a technique for detecting ungapped sub-sequences that match a given query sequence. BLAST can be used as a preliminary step for detecting ORF boundaries.

[54] "BLASTP" refers to a BLAST program that compares an amino acid query sequence against a protein sequence database.

[55] "BLASTX" refers to a BLAST program that compares the six-frame conceptual translation products of a nucleotide query sequence (both strands) against a protein sequence database. BLASTX can be used to create a sub-database of ORFs which may exist on a contig, and to identify the best match between one of these ORFs and a sequence in an external database.

[56] "Buffer" refers to a component in a solution to provide a buffered solution that resists changes in pH by the action of its acid-base conjugate components.

[57] "CDS" refers to the GenBank DNA sequence entry for coding sequence. A coding sequence is a sub-sequence of a DNA sequence that is surmised to encode a gene. A complete gene coding sequence begins with an "ATG" and ends with a stop codon.

[58] "Clone" in molecular biology refers to a vector carrying an insert DNA sequence.

[59] "Cloning" in molecular biology refers to a recombinant DNA technique used to produce multiple, up to millions or more, copies of a DNA sequence. The DNA sequence is

inserted into a small carrier or vector (*e.g.*, plasmid, bacteriophage, or virus) and inserted into a host cell for amplification or expression.

[60] "Cluster" refers to a group of ORFs related to one another by sequence homology. Clusters are generally determined by a specified degree of homology and overlap (*e.g.*, a stringency).

[61] "Comparison window" indicates a segment of any one of the number of contiguous positions selected from the group consisting of from 20 to 600, usually about 50 to about 200, more usually about 100 to about 150 in which a sequence may be compared to a reference sequence of the same number of contiguous positions after the two sequences are aligned to enhance sequence similarity. Methods of alignment of sequences for comparison will be readily apparent to a person of ordinary skill in the art in view of the present application.

[62] "Complementary" or "complementarity" refers to the natural binding of polynucleotides by base pairing. For example, the sequence "A-G-T" binds to the complementary sequence "T-C-A." Complementarity between two single-stranded molecules may be "partial," such that only some of the nucleic acids bind, or it may be "complete," such that all of the nucleotides of at least one of the single-stranded molecules binds to corresponding nucleotides of the other single-stranded molecule. The degree of complementarity between nucleic acid strands has significant effects on the efficiency and strength of the hybridization between the nucleic acid strands. This can be of particular importance in amplification reactions, which can depend upon binding between nucleic acids strands, and in the design and use of peptide nucleic acid (PNA) molecules.

[63] "Complex," or "aggregate," indicates a dimer or multimer formed between at least two proteins or other macromolecules, for example a GPCR and its ligand.

[64] "Composition" indicates a combination of multiple substances into a mixture.

[65] "Composition comprising a given amino acid sequence" refers broadly to any composition containing the given amino acid sequence. The composition may comprise a dry formulation, an aqueous solution, or a sterile composition.

[66] "Consensus sequence" refers to the sequence that reflects the most common choice of base or amino acid at each position from a series of related DNA, RNA, or protein sequences. Areas of particularly good agreement often represent conserved functional domains. The generation of consensus sequences has typically been subjected to intensive mathematical analysis.



- [67] **"Conservative changes"** to an amino acid sequence, see Analog.
- [68] **"Deletion"** refers to a change in the amino acid or nucleotide sequence that results in the absence of one or more amino acid residues or nucleotides.
- [69] **"Derivative"** refers to chemical modification of an antigenic peptide, or of an antibody specific for and created from the antigenic peptide. A derivative peptide can be modified, for example, by glycosylation or pegylation.
- [70] **"Diabodies"** refers to one type of antibody comprising small antibody fragments with two antigen-binding sites, which fragments comprise a heavy-chain variable domain ( $V_H$ ) connected to a light-chain variable domain ( $V_L$ ) on the same polypeptide chain ( $V_H$ - $V_L$ ).  
By using a linker that is too short to allow pairing between the two domains on the same chain, the domains pair with the complementary domains of another chain and create two antigen-binding sites. Diabodies are described, for example, in EP 404,097; WO 93/11161; and Holliger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993).
- [71] **"Database"** refers to a structured format for organizing and maintaining information or data, a collection of data records, in a computer-readable form that can be rapidly and easily retrieved. A database is typically stored in a computer-readable memory. Records may comprise web pages, graphics, audio files, text files, or links. Records may or may not be further broken into fields. Database records are usually indexed and come with a search interface to find records of interest.
- [72] **"E-value"** refers to a result of a FASTA analysis. The number indicates the probability that a match between two sequences is due to random chance.
- [73] **"Expression vector"** is a specialized vector constructed so that the gene inserted in the vector can be expressed in the cytoplasm of a host cell.
- [74] **"FASTA"** refers to a modular set of sequence comparison programs used to compare an amino acid or DNA sequence against all entries in a sequence database. FASTA was written by Professor William Pearson of the University of Virginia Department of Biochemistry. The program uses the rapid sequence algorithm described by Lipman and Pearson (1988) and the Smith-Waterman sequence alignment protocol. FASTA performs a protein to protein comparison.
- [75] **"FASTX"** refers to a module of the FASTA protocol used to define optimal ORF boundaries while searching for genes. FASTX uses a nucleotide to protein sequence comparison.

[76] "Fragment," see Portion.

[77] "GenBank" refers to a family of public databases comprising nucleic acid and amino acid sequence information, including the GenPept bacterial peptide database.

[78] "Gene" refers to the basic unit of heredity that carries the genetic information for a given RNA or protein molecule. A gene is composed of a contiguous stretch of DNA and contains a coding region that is flanked on each end by regions that are transcribed but not translated. A gene is a segment of DNA involved in producing a biologically active or biologically functional polypeptide chain.

[79] "Heterologous" indicates a nucleic acid that comprises two or more subsequences that are not found in the same relationship to each other in nature. For instance, the nucleic acid is typically recombinantly produced, having two or more sequences from unrelated genes arranged to make a new functional nucleic acid, *e.g.*, a promoter from one source and a coding region from another source. Similarly, a heterologous protein indicates that the protein comprises two or more subsequences that are not found in the same relationship to each other in nature (*e.g.*, a fusion protein).

[80] "Hit Threshold" refers to a pre-set E-value or P-value for evaluating sequence matches. For example, this value can be set at  $1e-6$  for finding genes; and at  $1e-15$  for clustering genes.

[81] "Homology" refers to a degree of complementarity. There may be partial homology or complete homology. The word "identity" may substitute for the word "homology." A partially complementary sequence that at least partially, and substantially, inhibits a corresponding sequence from hybridizing to a target nucleic acid is referred to as "substantially homologous." The inhibition of hybridization of the completely complementary sequence to the target sequence may be examined using a hybridization assay (*e.g.*, Southern or Northern blot, *in situ* hybridization, solution hybridization) under conditions of reduced stringency. A substantially homologous sequence or hybridization probe will compete for and inhibit the binding of a completely homologous sequence to the target sequence under stringency conditions that inhibit non-specific binding but permit specific binding. The absence of non-specific binding may be tested by the use of a second target sequence which lacks even a partial degree of complementarity (*e.g.*, less than about 30% homology or identity). In the absence of non-specific binding, the substantially

homologous sequence or probe will not hybridize to the second, non-complementary target sequence.

[82] **"Humanized antibody"** refers to antibody molecules in which the amino acid sequence in the non-antigen-binding regions has been altered so that the antibody more closely resembles a human antibody, and still retains its original binding ability. Typically, humanized antibodies are human immunoglobulins (recipient antibody) in which residues from a complementarity-determining region (CDR) of the recipient are replaced by residues from a CDR of a non-human species (donor antibody) such as mouse, rat or rabbit having the desired specificity, affinity, and capacity. In some instances, Fv framework residues of the human immunoglobulin are replaced by corresponding non-human residues. Furthermore, humanized antibodies may comprise residues that are found neither in the recipient antibody nor in the imported CDR or framework sequences. These modifications are typically made to further refine and optimize antibody performance. In general, the humanized antibody will comprise substantially all of at least one, and typically two, variable domains, in which all or substantially all of the CDR regions correspond to those of a non-human immunoglobulin and all or substantially all of the framework (FR) regions are those of a human immunoglobulin sequence. The humanized antibody optimally also will comprise at least a portion of an immunoglobulin constant region (Fc), typically that of a human immunoglobulin. For further details see, *e.g.*, Jones et al., *Nature*, 321:522-525 (1986); Reichmann et al., *Nature*, 332:323-329 (1988); and, Presta, *Curr. Op. Struct. Biol.*, 2:593-596 (1992).

[83] **"Identity,"** see Homology.

[84] **"Immunocytochemistry"** refers to the use of immunologic methods, including a specific antibody, to study cell constituents.

25 [85] **"Immunohistochemistry"** refers to the use of immunologic methods, including a specific antibody, to study specific antigens in tissue slices.

[86] **"Immunolocalization"** refers to the use of immunologic methods, including a specific antibody, to locate molecules or structures within cells or tissues.

[87] **"Immunologically active"** refers to the capability of a natural, recombinant, or synthetic GPCR, or any immunogenic fragment thereof, to induce a specific immune response in appropriate animals or cells and to bind with specific antibodies. A polypeptide is "immunologically active" if it is recognized by (*e.g.*, specifically bound by) a B-cell or T-

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cell surface antigen receptor. Immunological activity may generally be assessed using well known techniques, such as those summarized in Paul, *Fundamental Immunology*, 3rd ed., 243-247, Raven Press (1993) and references cited therein. Such techniques include screening polypeptides derived from the native polypeptide for the ability to react with antigen-specific antisera or T-cell lines or clones, which may be prepared in view of the present application using well known techniques. Preferably, an immunologically active portion of a GPCR protein reacts with such antisera or T-cells at a level that is not substantially lower than the reactivity of the full-length polypeptide (*e.g.*, in an ELISA or T-cell reactivity assay). Such screens may generally be performed using methods well known to those of ordinary skill in the art in view of the present application, such as those described in Harlow and Lane, *Antibodies: A Laboratory Manual*, Cold Spring Harbor Press (1988). B-cell and T-cell epitopes may also be predicted via computer analysis.

[88] "Immune response" refers to any of the body's immunologic reactions to an antigen such as antibody formation, cellular immunity, hypersensitivity, or immunological tolerance.

[89] "Insertion" and "addition" when referring to a change in a nucleotide or amino sequence indicate the addition of one or more nucleotides or amino acid residues, respectively, to the sequence.

[90] "*In situ* hybridization" refers to use of a nucleic acid probe, typically a DNA or RNA probe, to detect the presence of a DNA or RNA sequence in target cells such as cloned bacterial cells, cultured eukaryotic cells, or tissue samples. *In situ* hybridization can also be used for locating genes on chromosomes. The process can be performed by preparing a microscope slide with cells in metaphase of mitosis, then treating slide with a weak base to denature the DNA. Next, pour radioactively labeled probe onto the slide under hybridizing conditions, expose the slide to a photographic emulsion for a suitable period such as a few days or weeks, then develop the emulsion.

[91] "Isoform" refers to different forms of a protein that may be produced from different genes or from the same gene by alternative RNA splicing.

[92] "Isolated" generally means that the material is removed from its original environment (*e.g.*, the natural environment if it is naturally occurring).

[93] "Library" refers physically to a pool of nucleic acid fragments that has been propagated in a cloning vector. Library can also refer to an electronic collection of genomic

or proteomic sequence data, including raw sequences, contigs, ORFs and loci from a specific organism.

[94] "Ligand" refers to an ion or molecule that binds with another molecule, such as a GPCR, to form a macromolecule such as a receptor-ligand complex. An "endogenous  
5 ligand" refers to a native ligand that binds to the receptor of the GPCR and modulates biological activity or functionality of the GPCR in its native environment. A "specific ligand" is a ligand able to bind to a particular GPCR and modulate the biological activity or functionality of the particular GPCR; an endogenous ligand is one example of a specific ligand.

10 [95] "Microarray" refers to an array of distinct nucleic acid or amino acid molecules arrayed on a substrate, such as paper, nylon or any other type of membrane, filter, chip, glass slide, or any other suitable solid support. Microarrays can also refer to tissue microarrays, composed of small tissue pieces arranged on a slide. U.S. Pat. No. 5,143,854 and PCT Patent Publication Nos. WO 90/15070 and 92/10092.

15 [96] "Mimetic" refers to a molecule, *e.g.*, a peptide or non-peptide agent, such as a small molecule, that is able to perform the same biological activity as a certain biologically active agent. For example, some mimetics are molecules comprising the same biological function or activity as the particular GPCR. The structure of the mimetic can be developed from knowledge of the structure of the particular GPCR or portions thereof. For appropriate  
20 mimetics, the mimetic is able to effect some or all of the actions of a given antigenic peptide or antibodies against the antigenic peptide. Such mimetics can be made, in view of the present application, using techniques well known in the art, *see, e.g.*, U.S. Patent Nos. 6,197,752; 6,093,697; 6,207,643; 5,849,323, and can be included in the various processes, methods, and systems, *etc.*, described herein, such as databases, binding partner assays,  
25 probes, medicaments, and therapeutics.

[97] "Modulate" refers to controllably changing the activity of a substance or other item, such as the biological activity of a GPCR, antigenic peptide or corresponding antibody. For example, modulation may cause an increase or a decrease in protein activity, binding characteristics, or other biological, functional, or immunological properties of the GPCR.

30 [98] "Mon clonal antibody" refers to an antibody obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present

in minor amounts. Monoclonal antibodies include "chimeric" antibodies (immunoglobulins) in which a portion of the heavy or light chain is identical with or homologous to corresponding sequences in antibodies derived from a particular species or belonging to a particular antibody class or subclass, while the remainder of the chain(s) is identical with or homologous to corresponding sequences in antibodies derived from another species or belonging to another antibody class or subclass, as well as fragments of such antibodies, so long as they exhibit the desired biological activity. U.S. Pat. No. 4,816,567; Morrison et al., P.N.A.S. USA, 81:6851-6855 (1984). Monoclonal antibodies are highly specific, being directed against a single antigenic site. As a matter of distinction, polyclonal antibody preparations typically include different antibodies directed against different determinants (epitopes) of a target antigen whereas each monoclonal antibody is directed against a single determinant on the antigen. Monoclonal antibodies can be synthesized by hybridoma culture, uncontaminated by other immunoglobulins. For example, the monoclonal antibodies to be used in accordance with the present invention may be made by the hybridoma method first described by Kohler and Milstein, Nature, 256:495 (1975), or may be made by recombinant DNA methods. See, e.g., U.S. Pat. No. 4,816,567. Monoclonal antibodies may also be isolated from phage antibody libraries using the techniques described in Clackson et al., Nature, 352:624-628 (1991), and Marks et al., J. Mol. Biol., 222:581-597 (1991), for example. The modifier "monoclonal" indicates the character of the antibody as being obtained from a substantially homogeneous population of antibodies, and is not to be construed as requiring production of the antibody by any particular method.

[99] "Nonconservative" changes to an amino acid sequence, see Analog.

[100] "Northern blotting" or "Northern analysis" refers to a method used to detect specific RNA sequences. For example, the process can be performed by electrophoresing RNA in a denaturing agarose gel, transferring the gel onto a membrane, and hybridizing with a labeled RNA or DNA probe.

[101] "Nucleic acid sequence" refers to a polymer comprising a string of "nucleic acids" such as an oligonucleotide, or a polynucleotide or fragment thereof. The nucleic acid sequence can be from DNA or RNA of genomic or synthetic origin, may be single-stranded or double-stranded, and may represent the sense or the antisense strand. A nucleic acid sequence can also be a PNA or a DNA-like or RNA-like material. Unless stated otherwise,

the term encompasses nucleic acids containing known analogues or mimetics of natural nucleotides that have similar binding properties as the reference nucleic acid.

[102] **"Oligonucleotide"** refers to a nucleic acid sequence, generally between 6 nucleotides to 60 nucleotides, preferably about 15 to 30 nucleotides, and most preferably about 20 to 25 nucleotides, that can, for example, be used in PCR or other nucleic acid amplification or in a hybridization assay or microarray. "Oligonucleotide" includes "amplimers," "primers," "oligomers," and "probes," as these terms are commonly defined in the art. Oligonucleotides can be chemically synthesized. Such synthetic oligonucleotides may have no 5' phosphate and if so will not ligate to another oligonucleotide without adding a phosphate, typically by using an ATP in the presence of a kinase. A synthetic oligonucleotide will ligate to a fragment that has not been dephosphorylated.

[103] **"Operably linked"** or **"operably connected"** indicates that one element of an apparatus, system, or method, etc., is connected to another element of the apparatus, system, or method, etc., such that the two elements are able to perform their intended purposes. For example, when a promoter is linked to a polynucleotide to allow transcription of the polynucleotide, it is "operably linked" to the polynucleotide.

[104] **"Orphan receptor"** refers to a receptor for which the endogenous ligand or other ligands inducing biological activity are not known.

[105] **"PCR"** or **"polymerase chain reaction"** refers to an *in vitro* method that uses oligonucleotide primers, enzymes, and a series of repetitive temperature cycles to generate millions of copies of a nucleic acid, typically DNA, from an original specimen of a specific DNA sequence, which specimen may be present only in a trace amount.

[106] **"Plasmids"** refers to extrachromosomal genetic elements composed of DNA or RNA found in both eukaryotic and prokaryotic cells that can propagate themselves autonomously in cells. Plasmids can be used as carriers or vectors to clone DNA molecules. They are designated by a lower case p preceded or followed by capital letters or numbers. The starting plasmids herein are either commercially available, publicly available on an unrestricted basis, or can be constructed from available plasmids in accord with published procedures. In addition, equivalent plasmids to those described are known in the art and will be apparent to the ordinarily skilled artisan in view of the present application.

[107] **"Polynucleotide encoding a polypeptide"** indicates a polynucleotide that includes only the coding sequence for the polypeptide as well as polynucleotides that include additional coding or non-coding sequence.

5 [108] **"Portion"** or **"fragment"** with regard to a protein (as in "a portion of a given protein") refers to parts of that protein, a subsequence of the complete amino acid sequence of the receptor containing at least about 8, usually at least about 12, more typically at least about 20, and commonly at least about 30 or more contiguous amino acid residues, up to the entire amino acid sequence minus one amino acid. Thus, a protein "comprising at least a portion of the amino acid sequence of SEQ ID NO:XX" or a protein "comprising at least a portion of the

10 amino acid sequence of a particular GPCR" encompasses the full-length protein and fragments thereof. A portion or fragment of a nucleic acid refers to nucleic acid sequences that are greater than about 12 nucleotides in length, and typically at least about 60 or 100 nucleotides, generally at least about 1000 nucleotides, or at least about 10,000 nucleotides in length, up to the entire nucleic acid sequence minus one nucleic acid.

15 [109] **"P-value"** is a statistical term used to indicate the probability that an event is due to random chance. When used in reference to a result of BLAST searches, the number indicates the probability that a match between two sequences is due to random chance.

[110] **"Receptor"** refers to a molecular structure, typically within a cell or on a cell surface, that selectively binds a specific substance (a ligand) and a specific physiologic effect

20 that accompanies the binding. GPCRs are a type of cell-surface receptor, which means a protein in, on, or traversing the cell membrane (in the case of GPCRs, traversing the cell membrane) that recognizes and binds to specific molecules in the surrounding fluid. The binding to a receptor may serve to transport molecules into the cell's interior or to signal the cell to respond in some way.

25 [111] **"Recombinant"** refers to both a method of production and a structure. Some recombinant nucleic acids and proteins are made by the use of recombinant DNA techniques that involve human intervention, either in manipulation or selection. Others are made by fusing two fragments that are not naturally contiguous to each other. Engineered vectors are encompassed, as well as nucleic acids comprising sequences derived using any synthetic

30 oligonucleotide process.

[112] **"Sample"** is used in its usual broad sense. For example, a biological sample suspected of containing nucleic acids encoding the GPCR, or fragments thereof, or the GPCR



itself, may comprise a bodily fluid; an extract from a cell, chromosome, organelle, or membrane from a cell; a cell; genomic DNA, RNA, or cDNA (in solution or bound to a solid support); a tissue; a tissue print, and the like. Biological sample refers to samples from a healthy individual as well as to samples from a subject suspected of having or susceptible to

5 having, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal

10 cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma,

15 endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis,

20 rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma),

25 septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or

30 disorder in which a specific GPCR is involved.

[113] "Second messengers" refer to intracellular signaling molecules such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or  $\text{Ca}^{2+}$ . Second messengers, in turn, alter the

activity of other intracellular proteins such as cAMP-dependent protein kinase and  $\text{Ca}^{2+}$ /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal.

[114] "Southern blotting" refers to a method for detecting specific DNA sequences via hybridization. For example, a DNA sample can be electrophoresed in a denaturing agarose gel, transferred onto a membrane, and hybridized with a complementary nucleic acid probe. "Southern" when used in reference to a database indicates an electronic analog of the laboratory technique, which analysis can be used to identify libraries in which a given DNA sequence, such as a gene, EST, or ORF is present. The terms "Northern" and "Western" likewise can be used for electronic analogs to the respective laboratory techniques described above.

[115] "Specific binding" or "specifically binding" refers to an interaction between protein or peptide and a certain substance, such as its specific ligand or antibody, and in some cases its agonists or antagonists. The interaction is dependent upon the presence of a particular structure of the protein recognized by the binding molecule (e.g., the antigenic determinant or epitope). For example, if an antibody specifically binds epitope "A," the presence of a polypeptide containing epitope A or the presence of free unlabeled epitope A will reduce the amount of labeled epitope A that binds to the antibody in a reaction containing free labeled epitope A and the antibody. Conversely, the presence of a polypeptide that does not contain epitope A will not reduce the amount of labeled epitope A that binds to the antibody. Highly specific binding indicates that the protein or peptide binds to its particular ligand, antibody, etc., and does not bind in a significant amount to other proteins present in the sample. Typically, a specific or selective reaction will be at least twice the background signal or noise and more typically more than 10 to 100 times the background signal or noise.

[116] "Stringent conditions" refer to conditions that permit hybridization between complementary polynucleotide sequences. Suitably stringent conditions can be defined by, for example, the concentrations of salt or formamide in the prehybridization and hybridization solutions, or by the hybridization temperature. Stringency can be increased by reducing the concentration of salt, increasing the concentration of formamide, or raising the hybridization temperature. Stringent conditions are dependent upon the type of probe as well as the length of the probe and the GC content of the probe. "Stringent conditions" typically

occur within a range from about  $T_m - 5^\circ\text{C}$  ( $5^\circ\text{C}$  below the melting temperature ( $T_m$ ) of the probe) to about  $T_m - 20 - 25^\circ\text{C}$  for a cRNA probe and to about  $T_m - 15^\circ\text{C}$  for an oligonucleotide probe. **"Highly stringent conditions"** refers to conditions under which a probe will hybridize to its target sequence, typically in a complex mixture of nucleic acid sequences, but will not substantially hybridize to other sequences. One example of high stringency conditions for a cRNA probe that is 1,000 nucleotides in length and has a GC content of about 60% is about  $55 - 65^\circ\text{C}$  in 50% formamide, 0.1 X SSC, and 200  $\mu\text{g/ml}$  sheared and denatured salmon sperm DNA. One example of low stringency conditions for the same probe in 50% formamide, 0.1 X SSC, and 200  $\mu\text{g/ml}$  sheared and denatured salmon sperm DNA would be  $30 - 35^\circ\text{C}$ . **"Very highly stringent conditions"** indicates that there must be complete identity between the sequences. The temperature range corresponding to a particular level of stringency can be narrowed further by calculating the purine to pyrimidine ratio of the nucleic acid of interest and adjusting the temperature accordingly. Variations on and modifications of the above ranges and conditions will be readily appreciated by those of skill in the art in view of the present application. As will be understood by those of skill in the art in view of the present application, the stringency of hybridization can be altered to identify or detect identical or related polynucleotide sequences. One guide for nucleic acid hybridization is Tijssen, Laboratory Techniques in Biochemistry and Molecular Biology-v.24 Hybridization with Nucleic Acid Probes, Part I "Overview of principles of hybridization and the strategy of nucleic acid assays" (New York: Elsevier 1993).

[117] **"Substantially purified"** refers to nucleic acid or amino acid sequences that are removed from their natural environment and are separated from other components from such natural environment, and are at least about 60% free, preferably about 75% or 85% free, and most preferably about 90%, 95% or 99% free from such other components with which they are naturally associated. Substantially purified preferably indicates a substantially homogeneous state and can be in either a dry or aqueous solution or other composition as desired. Purity and homogeneity can be assayed by standard methods, for example on a mass or molar basis, using analytical chemistry techniques such as polyacrylamide gel electrophoresis or high performance liquid chromatography.

[118] "Substitution" when referring to a change in a nucleotide or amino sequence indicates the replacement of one or more nucleotides or amino acids by different nucleotides or amino acids, respectively.

[119] "Variant," see Analog.

5 [120] "Western blotting" or "Western analysis" refers to a method for detecting specific protein sequences. For example, the process can be performed by electrophoresing a protein mixture in a denaturing agarose or acrylamide gel, transferring the mixture onto a membrane, and incubating it with an antibody raised against the protein of interest.

[121] Other terms and phrases are defined in other portions of this application.

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### C. SELECTION OF DESIRED ANTIGENIC PEPTIDES FOR GPCRs AND OTHER POLYPEPTIDES

[122] The present invention provides improved antigenic peptides, for example as set forth in Figure 2, SEQ ID NOS. 692-2292, and improved methods of identifying such  
15 antigenic peptides from known or publicly available sequences of polypeptides or proteins, i.e., from a candidate polypeptide sequence. Polypeptide and protein are used in their traditional sense to indicate lengthy amino acid molecules, whereas the antigenic peptide has a length significantly less than the length of the corresponding polypeptide or protein such that the antigenic peptide is capable of providing significantly improved antigenicity relative  
20 to the corresponding polypeptide or protein, typically improved specificity, affinity or avidity. The candidate polypeptide can be, for example, a human protein or polypeptide, a naturally occurring protein or polypeptide or a synthetic or recombinant protein or polypeptide.

[123] The antigenic peptides are typically 5 to about 100 amino acids in length, preferably  
25 6 to about 50 amino acids, and further preferably 7 to about 20 amino acids. The antigenic peptides include short antigenic amino acid sequences (i.e., peptides comprising only a portion of an antigenic sequence as set forth in Figure 2 or as identified using the methods described herein, plus an insignificant number of additional amino acids at one or both ends, where insignificant indicates that the extra amino acids do not substantially interfere with the  
30 antigenicity of the antigenic peptide). Such short antigenic peptides can be identical to at least 5, 6, 7 or more consecutive amino acids of the sequences herein or identified using the methods described herein, or can have one or two (or more, with increasing length)

conservative amino acid substitution for antigenic peptides comprising more than 6 or 7 consecutive amino acids of the sequences herein or identified using the methods described herein. Antigenic peptides and sequences, and related antibodies and assays and the like, are discussed further elsewhere herein with regard to GPCRs, but such discussions applies to all antigenic peptides produced according to the methods herein, including proteins and polypeptides such as kinases, phosphatases and any other desired protein or polypeptide.

[124] The identification or selection methods comprise searching the candidate polypeptide sequence using a comparison window of the desired length, then selecting against or rejecting amino acid sequences of the length and having at least 1 characteristic selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, at least 5, 7, 8, or all of the characteristics are selected.

[125] The identification or selection methods can also comprise selecting against amino acid sequences having at least 5 consecutive amino acids that are identical to an alternative amino acid sequence from an alternative polypeptide, i.e., some polypeptide other than the candidate polypeptide from which the selected antigen was derived, that is different from the candidate polypeptide, posttranslational modification sites, or highly hydrophobic sequences, which indicates sequences adequately hydrophobic to be located in a lipid membrane such as a cellular membrane. The posttranslational modification sites can be phosphorylation or glycosylation sites.

[126] The methods can further comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence. Exemplary BLAST-type and FAST-type analyses are described above, including BLAST, BLASTP, BLASTX, FASTA, and FASTX.

#### D. GENERAL DISCUSSION OF ANTIGENIC PEPTIDES RELATED TO PARTICULAR GPCRS

##### [127] ANTIGENIC PEPTIDES GENERALLY:

[128] The present invention includes antigenic peptides able to induce specific immunogenic responses, and corresponding binding partners. Such antigenic peptides and

binding partners can be cloned, expressed, isolated, purified, and otherwise obtained or manipulated according to routine methods known in the art in view of the present application.

[129] The present invention further relates to antigenic peptides having an amino acid sequence from a particular GPCR, including analogs, mimetics, fragments, derivatives, and the like of such antigenic peptides. See SEQ ID NOS. 1-2292, Figures 1-3. The antigenic peptides may be recombinant, natural or synthetic. The antigenic peptides include (i) antigenic peptides in which one or more of the amino acid residues are substituted with a conserved or non-conserved amino acid residue (preferably a conserved amino acid residue) and such substituted amino acid residue may or may not be one encoded by the genetic code, (ii) antigenic peptides in which one or more of the amino acid residues includes a substituent group, (iii) antigenic peptides in which the mature polypeptide is complexed (*e.g.*, fused or otherwise bonded) with another compound, such as a compound to increase the half-life of the polypeptide (for example, polyethylene glycol), and (iv) antigenic peptides in which additional amino acids are fused to the antigenic peptide. Preparing and using such analogs, etc., are within the scope of those skilled in the art in view of the present application. The antigenic peptides additionally include antigenic peptides that have at least about 90% identity to the given antigenic peptide, and preferably at least about 95% identity to the antigenic peptide. The antigenic peptides additionally include antigenic peptides that contain at least five, six, seven or more consecutive amino acids that are identical to the given antigenic peptide, as well as antigenic peptides that contain at least six, seven, eight or more consecutive amino acids that are identical to the given antigenic except for one or two conservative changes within this such stretch of amino acids. The antigenic peptides of the present invention can be produced by peptide synthesis.

**[130] EXPRESSION PROFILES BASED ON PROTEINS:**

[131] An expression profile of a particular GPCR in one or more tissues can be made using antibodies or other binding partners produced using the antigenic peptides herein, then using traditional approaches such as Western blotting, immunohistochemistry analysis, protein array, ligand-binding studies, radioimmunoassay (RIA), and high performance liquid chromatography (HPLC), and immunohistochemistry analysis. H&E staining and other analyses can be used in combination with such immunologically-based analyses.

**[132] SCREENING FOR ACTIVITY:**

[133] The activity or functionality of an antigenic peptide can be measured using any of a variety of assays known in the art. Similarly, the specificity or affinity of an antibody or other binding partner made using the antigenic peptide can be measured using any of a variety of assays known in the art

5 [134] The activity or functionality of a particular GPCR may be measured using any of a variety of functional assays in which activation of the receptor in question results in an observable change in the level of some second messenger system, including but not limited to adenylyl cyclase, calcium mobilization, arachidonic acid release, ion channel activity, inositol phospholipid hydrolysis, or guanylyl cyclase. Heterologous expression systems utilizing  
10 appropriate host cells to express the nucleic acid of the subject invention are used to obtain the desired second messenger coupling. Receptor activity may also be assayed in an oocyte expression system.

[135] **PROTEIN PURIFICATION:**

[136] The antigenic peptides and proteins or polypeptides containing them can be purified  
15 by standard methods, including but not limited to salt or alcohol precipitation, preparative disc-gel electrophoresis, isoelectric focusing, high pressure liquid chromatography (HPLC), reversed-phase HPLC, gel filtration, cation and anion exchange, partition chromatography, and countercurrent distribution. Suitable purification methods will be readily apparent to those skilled in the art in view of the present application and are disclosed, *e.g.*, in Guide to  
20 Protein Purification, Methods in Enzymology, Vol. 182, M. Deutscher, Ed., Academic Press, New York, NY (1990). Purification steps can be followed as part of carrying out assays for ligand binding activity. Particularly where a particular GPCR is being isolated from a cellular or tissue source, it is preferable to include one or more inhibitors of proteolytic enzymes in the assay system, such as phenylmethylsulfonyl fluoride (PMSF).

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E. CERTAIN ASSAYS, ANTIBODIES, PROBES, THERAPEUTICS, AND  
OTHER SYSTEMS AND ASPECTS, OF THE INVENTION

1. SYSTEMS AND METHODS FOR SCREENING FOR A  
PARTICULAR GPCR OR ANTIGENIC PEPTIDE

30 [137] **SCREENING FOR ANTIGENIC PEPTIDES:**

[138] As noted elsewhere herein, the present invention provides antigenic peptides and antibodies that are specific for a particular GPCR. The invention also provides systems and

methods for using or detecting such peptides, and antibodies against such peptides or corresponding GPCRs in a sample. The assays are based on the detection of the antigenic peptides, typically as they are displayed by the particular GPCR, or the detection of antibodies produced against the particular antigenic peptides and corresponding GPCRs.

5    **[139]    SCREENING FOR/WITH ANTIGENIC PEPTIDES:**

**[140]**    Many assays are characterized by the ability of antigenic peptides for a particular GPCR to be bound by antibodies against them, and the ability of antibodies produced against such antigenic peptides to bind to antigens or epitopes of the particular GPCR in a sample. Some exemplary assays are described below and elsewhere herein.

10   **[141]    LIST OF ASSAYS:**

**[142]**    A variety of assays can detect antibodies that bind specifically to the desired protein in or from a sample, or detect a desired protein bound to one or more antibodies in or from the sample. Exemplary assays are described in detail in *Antibodies: A Laboratory Manual*, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press (1988). Representative  
15   examples of such assays include: countercurrent immuno-electrophoresis (CIEP), radioimmunoassays, radioimmunoprecipitations, enzyme-linked immunosorbent assays (ELISA), dot blot assays, inhibition or competition assays, sandwich assays, immunostick (dip-stick) assays, simultaneous assays, immunochromatographic assays, immunofiltration assays, latex bead agglutination assays, immunofluorescent assays, biosensor assays, and  
20   low-light detection assays. See U.S. Pat. Nos. 4,376,110 and 4,486,530; WO 94/25597; WO/25598.

**[143]            ENZYME-LINKED IMMUNOSORBENT ASSAYS (ELISA):**

**[144]**    One assay for the detection of a particular GPCR is a sandwich assay such as an enzyme-linked immunosorbent assay (ELISA). In one preferred embodiment, the ELISA  
25   comprises the following steps: (1) coating the particular GPCR antigenic peptide onto a solid phase, (2) incubating a sample suspected of containing anti-particular GPCR antibodies with the antigenic peptide coated onto the solid phase under conditions that allow the formation of an antigen-antibody complex, (3) adding an anti-antibody (such as anti-IgG) conjugated with a label to be captured by the resulting antigen-antibody complex bound to the solid phase,  
30   and (4) measuring the captured label and determining therefrom whether the sample contains anti-particular GPCR antibodies.

**[145]            IMMUNOFLUORESCENCE ASSAY:**



[146] A fluorescent antibody test (FA-test) uses a fluorescently labeled antibody able to bind to one of the proteins of the invention. For detection, visual determinations are made by a technician using fluorescence microscopy, yielding a qualitative result. In one embodiment, this assay is used for the examination of tissue samples or histological sections.

5 [147] **BEAD AGGLUTINATION ASSAYS:**

[148] In latex bead agglutination assays, antibodies to one or more of the antigenic peptides of the present invention are conjugated to latex beads. The antibodies conjugated to the latex beads are then contacted with a sample under conditions permitting the antibodies to bind to desired proteins in the sample, if any. The results are then read visually, yielding a qualitative result. In some embodiments, as with certain other assays, this format can be used in the field for on-site testing.

[149] **ENZYME IMMUNOASSAYS:**

[150] Enzyme immunoassays (EIA) include a number of different assays that can use the antibodies described in the present application. For example, a heterogeneous indirect EIA uses a solid phase coupled with an antibody of the invention and an affinity purified, anti-IgG immunoglobulin preparation. The solid phase can be a polystyrene microtiter plate. The antibodies and immunoglobulin preparation are then contacted with the sample under conditions permitting antibody binding, which conditions are well known in the art. The results of such an assay can be read visually or using a device such as a spectrophotometer, such as an ELISA plate reader, to yield a quantitative result. An alternative solid phase EIA format includes plastic-coated ferrous metal beads able to be moved during the procedures of the assay by means of a magnet. Yet another alternative is a low-light detection immunoassay format. In this highly sensitive format, the light emission produced by appropriately labeled bound antibodies are quantified automatically. Preferably, the reaction is performed using microtiter plates.

[151] In an alternative embodiment, a radioactive tracer is substituted for the enzyme-mediated detection in an EIA to produce a radioimmunoassay (RIA).

[152] **SANDWICH ASSAY:**

[153] In a capture-antibody sandwich enzyme assay, the desired protein is bound between an antibody attached to a solid phase, preferably a polystyrene microtiter plate, and a labeled antibody. The results can be measured, for example, using a spectrophotometer, such as an ELISA plate reader.

**[154] SEQUENTIAL AND SIMULTANEOUS ASSAYS:**

[155] In a sequential assay format, reagents are allowed to incubate with the capture antibody in a stepwise fashion. The test sample is first incubated with the capture antibody. Following a wash step, incubation with the labeled antibody occurs. In a simultaneous assay, 5 the two incubation periods described in the sequential assay are combined. This eliminates one incubation period plus a wash step.

**[156] IMMUNOSTICK (DIP-STICK) ASSAYS:**

[157] A dipstick/immunostick format is essentially an immunoassay using a polystyrene paddle or dipstick instead of a polystyrene microtiter plate as the solid phase. Reagents are 10 the same and the format can either be simultaneous or sequential.

**[158] IMMUNOCHROMATOGRAPHIC ASSAYS:**

[159] In a chromatographic strip test format, a capture antibody and a labeled antibody are dried onto a chromatographic strip, which typically comprises nitrocellulose or high porosity nylon bonded to cellulose acetate. The capture antibody is usually spray dried as a line at one 15 end of the strip. At this end, there is an absorbent material that is in contact with the strip. At the other end of the strip, the labeled antibody is deposited in a manner that prevents it from being absorbed onto the membrane. Usually, the label attached to the antibody is a latex bead or colloidal gold. The assay may be initiated by applying the sample immediately in front of the labeled antibody.

**20 [160] IMMUNOFILTRATION ASSAYS:**

[161] Immunofiltration/immunoconcentration formats combine a large solid-phase surface with directional flow of sample/reagents, which concentrates and accelerates the binding of antigen to antibody. In an exemplary format, the test sample is preincubated with a labeled antibody, and then applied to a solid phase such as fiber filters, nitrocellulose membranes, or 25 the like. The solid phase can also be precoated with latex or glass beads coated with capture antibody. Detection of analyte is the same as that in a standard immunoassay. The flow of sample/reagents can be modulated by either vacuum or the wicking action of an underlying absorbent material.

**[162] BIOSENSOR ASSAYS:**

30 [163] A threshold biosensor assay is a sensitive, instrumented assay amenable to screening large numbers of samples at low cost. In one embodiment, such an assay comprises the use of light-addressable potentiometric sensors wherein the reaction involves

the detection of a pH change due to binding of the desired protein by capture antibodies, bridging antibodies, and urease-conjugated antibodies. Upon binding, a pH change is effected that is measurable by translation into electrical potential ( $\mu$ volts). The assay typically occurs in a very small reaction volume, and is very sensitive; the reported detection  
5 limit of the assay is 1,000 molecules of urease per minute.

## 2. ANTIBODIES

### **[164] ANTIBODIES GENERATED AGAINST A PARTICULAR ANTIGENIC PEPTIDE AND ITS CORRESPONDING GPCR:**

10 **[165]** Highly specific, high affinity or antibodies against a particular GPCR or other polypeptide can be generated using the antigenic peptides herein and using antibody generation techniques as described herein or elsewhere. The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR  
15 in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected. The antibodies produced using the antigenic peptides of the present invention,  
20 for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole, preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

**[166]** The antibodies can be used to conduct immunohistochemistry and other analyses of a variety of tissue samples to determine expression of a particular GPCR in such tissues, for  
25 diagnostic assays, and for other desired purposes. The specification will now discuss a variety of antibody types, methods, uses, etc.

### **[167] ANTIBODIES GENERALLY:**

**[168]** In some embodiments, the present invention provides antibodies and other binding partners created using the antigenic peptides herein and directed to a particular GPCR from  
30 which the antigenic peptides were derived. Compositions and uses for such antibodies are contemplated, including diagnostic, medicament, and therapeutic uses. Various diagnostic, medicament, and therapeutic uses for antibodies have been reviewed above and, for example,

in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.*, 53:189-204 (1990); Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)*, 50(8):901-909 (1990); and, U.S. Pat. No. 6,214,984.

[169] Recognized immunoglobulin genes include the kappa, lambda, alpha, gamma, delta, epsilon, and mu constant region genes, as well as myriad immunoglobulin variable region genes. Light chains are classified as either kappa or lambda. Heavy chains are classified as gamma, mu, alpha, delta, or epsilon, which in turn define the immunoglobulin classes, IgG, IgM, IgA, IgD, and IgE, respectively. An exemplary immunoglobulin (antibody) structural unit comprises a tetramer. Each tetramer is composed of two identical pairs of antigenic peptide chains, each pair having one "light" chain (about 25 kD) and one "heavy" chain (about 50-70 kD). The N-terminus of each chain defines a variable region of about 100 to 110 or more amino acids primarily responsible for antigen recognition. The terms variable light chain (V<sub>L</sub>) and variable heavy chain (V<sub>H</sub>) refer to these light and heavy chains respectively.

15 [170] **ANTI-IDIOTYPIC ANTIBODIES:**

[171] The present invention encompasses anti-idiotypic antibodies, including polyclonal and monoclonal anti-idiotypic antibodies, that are produced using the antibodies described herein as antigens. These anti-idiotypic antibodies are useful because they may mimic the structures of the antigenic peptides set forth herein.

20 [172] Techniques for producing antibodies, including antibody fragments, include the following.

a. Antibody Preparation

(i) Polyclonal Antibodies

25 [173] **ANTIBODY PREP - POLYCLONAL:**

[174] Polyclonal antibodies are generally raised in animals by multiple subcutaneous (sc) or intraperitoneal (ip) injections of the relevant antigen and an adjuvant. It may be useful to conjugate the relevant antigen to a protein that is immunogenic in the species to be immunized, e.g., keyhole limpet hemocyanin, serum albumin, bovine thyroglobulin, or soybean trypsin inhibitor, using a bifunctional or derivatizing agent, for example, maleimidobenzoyl sulfosuccinimide ester (conjugation through cysteine residues), N-

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hydroxysuccinimide (through lysine residues), glutaraldehyde, succinic anhydride,  $\text{SOCl}_2$ , or  $\text{R}^1\text{N}=\text{C}=\text{NR}$ , where R and  $\text{R}^1$  are different alkyl groups.

**[175] ANTIBODY PREP – ADJUVANTS (ALL ABS):**

[176] Suitable adjuvants for the vaccination of animals for the production of polyclonal, monoclonal, and other antibodies include but are not limited to Adjuvant 65 (containing peanut oil, mannide monooleate, and aluminum monostearate); Freund's complete or incomplete adjuvant; mineral gels such as aluminum hydroxide, aluminum phosphate, and alum; surfactants such as hexadecylamine, octadecylamine, lysolecithin, dimethyldioctadecylammonium bromide, N,N-dioctadecyl-N',N'-bis(2-hydroxymethyl) propanediamine, methoxyhexadecylglycerol, and pluronic polyols; polyanions such as pyran, dextran sulfate, poly IC, polyacrylic acid, and carbopol; peptides such as muramyl dipeptide, dimethylglycine, tuftsin, stress proteins, core-containing proteins from a positive stranded RNA virus, *see* US Pat. No. 6,153,378; and, oil emulsions. The antigenic peptides could also be administered following incorporation into liposomes or other microcarriers.

[177] Information concerning adjuvants and various aspects of immunoassays are disclosed, *e.g.*, in the series by P. Tijssen, Practice and Theory of Enzyme Immunoassays, 3rd Edition (1987), Elsevier, New York. Other useful references covering methods for preparing polyclonal antisera include Microbiology, Hoeber Medical Division, Harper and Row (1969); Landsteiner, Specificity of Serological Reactions, Dover Publications, New York (1962); and, Williams, et al., Methods in Immunology and Immunochemistry, Vol. 1, Academic Press, New York (1967).

[178] Animals can be immunized against the antigen, immunogenic conjugates, or derivatives by combining 1 mg or 1  $\mu\text{g}$  of the peptide or conjugate (for rabbits or mice, respectively) with 3 volumes of Freund's complete adjuvant and injecting the solution intradermally at multiple sites. One month later the animals are boosted with 1/5 to 1/10 the original amount of peptide or conjugate in Freund's complete adjuvant by subcutaneous injection at multiple sites. Seven to 14 days later the animals are bled and the serum is assayed for antibody titer. Animals are boosted until the titer plateaus. Preferably, the animal is boosted with the conjugate of the same antigen, but conjugated to a different protein or through a different cross-linking reagent. Conjugates also can be made in recombinant cell culture as protein fusions. In addition, aggregating agents such as alum can be suitably used to enhance the immune response.

## (ii) Monoclonal Antibodies

**[179] ANTIBODY PREP - MONOCLONAL:**

**[180]** Monoclonal antibodies are obtained from a population of substantially  
5 homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present in minor amounts. For example, monoclonal antibodies can be made using the hybridoma method first described by Kohler and Milstein, *Nature*, 256:495 (1975), or can be made by recombinant DNA methods, or otherwise as desired.

10 **[181]** In the hybridoma method, a mouse, or other appropriate host animal, such as a hamster, is immunized as described herein to elicit lymphocytes that produce or are capable of producing antibodies that will bind specifically to the antigenic peptide used for immunization. Alternatively, lymphocytes may be immunized *in vitro*. Lymphocytes then are fused with myeloma cells using a suitable fusing agent, such as polyethylene glycol, to  
15 form a hybridoma cell, Goding, *Monoclonal Antibodies: Principles and Practice*, pp. 59-103, Academic Press (1986).

**[182]** The hybridoma cells thus prepared are seeded and grown in a suitable culture medium that preferably contains one or more substances that inhibit the growth or survival of the unfused, parental myeloma cells. For example, if the parental myeloma cells lack the  
20 enzyme hypoxanthine guanine phosphoribosyl transferase (HGPRT or HPRT), the culture medium for the hybridomas typically will include hypoxanthine, aminopterin, and thymidine (HAT medium), which substances prevent the growth of HGPRT-deficient cells.

**[183]** Preferred myeloma cells are those that fuse efficiently, support stable high-level production of antibody by the selected antibody-producing cells, and are sensitive to a  
25 medium such as HAT medium, for example murine myeloma lines, such as those derived from MOPC-21 and MPC-11 mouse tumors available from the Salk Institute Cell Distribution Center, San Diego, CA USA, and SP-2 cells available from the American Type Culture Collection, Rockville, MD USA. Human myeloma and mouse-human heteromyeloma cell lines have also been described for the production of human monoclonal  
30 antibodies, Kozbor, *J. Immunol.*, 133:3001 (1984); Brodeur et al., *Monoclonal Antibody Production Techniques and Applications*, pp. 51-63, Marcel Dekker, Inc., New York (1987).

[184] Culture medium in which hybridoma cells are growing is assayed for production of monoclonal antibodies directed against the antigenic peptide. The binding specificity of monoclonal antibodies produced by hybridoma cells can be determined by immunoprecipitation or by an *in vitro* binding assay, such as radioimmunoassay (RIA) or enzyme-linked immunosorbent assay (ELISA). The binding affinity of the monoclonal antibody can, for example, be determined by the Scatchard analysis of Munson and Pollard, Anal. Biochem., 107:220 (1980). The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole, preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

[185] After hybridoma cells are identified that produce antibodies of the desired specificity, affinity, or activity, the clones may be subcloned by limiting dilution procedures and grown by standard methods (Goding, *supra*). Suitable culture media for this purpose include, for example, D-MEM or RPMI-1640 medium. In addition, the hybridoma cells may be grown *in vivo* as ascites tumors in an animal.

[186] The monoclonal antibodies secreted by the subclones are suitably separated from the culture medium, ascites fluid, or serum by conventional immunoglobulin purification procedures such as, for example, protein A-SEPHAROSE<sup>TM</sup>, hydroxyapatite chromatography, gel electrophoresis, dialysis, or affinity chromatography.

[187] DNA encoding the monoclonal antibodies can be readily isolated and sequenced using conventional procedures (e.g., by using oligonucleotide probes that are capable of binding specifically to genes encoding the heavy and light chains of murine antibodies). The hybridoma cells serve as a preferred source of such DNA. Once isolated, the DNA may be placed into expression vectors, which can then be transfected into host cells such as *E. coli* cells, simian COS cells, Chinese hamster ovary (CHO) cells, or myeloma cells that do not otherwise produce immunoglobulin protein, to obtain the synthesis of monoclonal antibodies in the recombinant host cells. Review articles on recombinant expression in bacteria of DNA encoding antibody include Skerra et al., Curr. Opinion in Immunol., 5:256-262 (1993), and Pluckthun, Immunol. Revs., 130:151-188 (1992).

#### [188] MOABS - COMBINATORIAL:

[189] In a further embodiment, antibodies or antibody fragments can be isolated from antibody phage libraries generated using the techniques described in McCafferty et al.,

Nature, 348:552-554 (1990), using the proper antigen such as CD11a, CD18, IgE, or HER-2 to select for a suitable antibody or antibody fragment. Clackson et al., Nature, 352:624-628 (1991) and Marks et al., J. Mol. Biol., 222:581-597 (1991) describe the isolation of murine and human antibodies, respectively, using phage libraries. Subsequent publications describe the production of high affinity (nM range) human antibodies by chain shuffling, Marks et al., Biotechnology, 10:779-783 (1992), as well as combinatorial infection and *in vivo* recombination as strategies for constructing very large phage libraries, Waterhouse et al., Nuc. Acids. Res., 21:2265-2266 (1993). Combinatorial antibodies are also discussed in Huse et al., Science 246:1275-1281 (1989), and Sastry et al., Proc. Natl. Acad. Sci. USA, 86:5728-5732 (1989), and Alting-Mees et al., Strategies in Molecular Biology 3:1-9 (1990). These references describe a system commercially available from Stratacyte, La Jolla, CA USA. Briefly, mRNA is isolated from a B cell population and utilized to create heavy and light chain immunoglobulin cDNA expression libraries in the  $\lambda$ IMMUNOZAP(H) and  $\lambda$ IMMUNOZAP(L) vectors. These vectors may be screened individually or co-expressed to form Fab fragments or antibodies, *see* Huse et al., *supra*; *see also* Sastry et al., *supra*. Positive plaques can subsequently be converted to a non-lytic plasmid, which allows for high-level expression of monoclonal antibody fragments from *E. coli*.

**[190] HUMANIZED MOAB:**

**[191]** Binding partners can also be constructed utilizing recombinant DNA techniques to incorporate the variable regions of a gene that encode a specifically binding antibody. The construction of these binding partners can be readily accomplished by one of ordinary skill in the art in view of the present application. *See* Larrick et al., Biotechnology, 7:934-938 (1989); Riechmann et al., Nature, 332:323-327 (1988); Roberts et al., Nature, 328:731-734 (1987); Verhoeyen et al., Science 239:1534-1536 (1988); Chaudhary et al., Nature, 339:394-397 (1989); *see also* U.S. Pat. No. 5,132,405 entitled "Biosynthetic Antibody Binding Sites".) For example, the DNA can be modified by substituting the coding sequence for human heavy- and light-chain constant domains in place of homologous murine sequences, U.S. Pat. No. 4,816,567; Morrison, et al., Proc. Nat. Acad. Sci., 81:6851 (1984), or by covalently joining to the immunoglobulin coding sequence all or part of the coding sequence for a non-immunoglobulin polypeptide. In another example, DNA segments encoding the desired antigen-binding domains specific for the protein or peptide of interest are amplified from appropriate hybridomas and inserted directly into the genome of a cell that produces human



antibodies. *See* Verhoeyen et al., *supra*; *see also* Reichmann et al., *supra*. Some of these techniques transfer the antigen-binding site of a specifically binding mouse or rat monoclonal antibody or the like to a human antibody. Such antibodies can be preferable for therapeutic use in humans because they are typically not as antigenic as rat or mouse antibodies.

- 5 [192] In an alternative embodiment, genes that encode the variable region from a hybridoma producing a monoclonal antibody of interest can be amplified using oligonucleotide primers for the variable region. These primers may be synthesized by one of ordinary skill in the art, or may be purchased from commercially available sources. For instance, primers for mouse and human variable regions including, among others, primers for
- 10  $V_{H\alpha}$ ,  $V_{H\beta}$ ,  $V_{H\gamma}$ ,  $V_{H\delta}$ ,  $C_{H1}$ ,  $V_L$ , and  $C_L$  regions are available from Stratacyte (La Jolla, CA). These primers may be utilized to amplify heavy- or light-chain variable regions, which may then be inserted into vectors such as IMMUNOZAP<sup>TM</sup>(H) or IMMUNOZAP<sup>TM</sup>(L) (Stratacyte), respectively. These vectors may then be introduced into *E. coli* for expression. Utilizing these techniques, large amounts of a single-chain protein containing a fusion of the
- 15  $V_H$  and  $V_L$  domains may be produced, *see* Bird et al., *Science* 242:423-426 (1988).

**[193] ANTIBODY SUBSTITUTIONS - NON-IMMUNOGLOBULIN POLYPEPTIDES (ALL ABS):**

- [194] Non-immunoglobulin polypeptides can be substituted in monoclonal and other antibodies described herein for the constant domains of an antibody, or they can be
- 20 substituted for the variable domains of one antigen-combining site of an antibody to create a chimeric bivalent antibody comprising one antigen-combining site having specificity for an antigen and another antigen-combining site having specificity for a different antigen.

**[195] CHIMERICS:**

- [196] Chimeric or hybrid antibodies can also be prepared *in vitro* using known methods in
- 25 synthetic protein chemistry, including those involving crosslinking agents, in view of the present application. For example, immunotoxins may be constructed using a disulfide-exchange reaction or by forming a thioether bond. Examples of suitable reagents for this purpose include iminothiolate and methyl-4-mercaptobutyrimidate.

**[197] ANTIBODY LABELING (ALL ABS):**

- 30 [198] For diagnostic applications or otherwise as desired, and for monoclonal and other antibodies described herein, the antibodies and other binding partners typically will be labeled with a detectable moiety. The detectable moiety can be any moiety that is capable of

producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as  $^3\text{H}$ ,  $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ , or  $^{125}\text{I}$ ; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or horseradish peroxidase. Any method known in the art for conjugating the antibody or binding partner to the detectable moiety may be employed, including those methods described by Hunter et al., *Nature*, 144:945 (1962); David et al., *Biochemistry*, 13:1014 (1974); Pain et al., *J. Immunol. Meth.*, 40:219 (1981); and Nygren, *J. Histochem. Cytochem.*, 30:407 (1982).

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## (iii) Humanized And Human Antibodies

**[199] HUMANIZED AB GENERALLY:**

**[200]** Methods for humanizing non-human antibodies are well known in the art and have been discussed in part above. Generally, a humanized antibody has one or more amino acid residues introduced into it from a source which is non-human. These non-human amino acid residues are often referred to as "import" residues, which are typically taken from an "import" variable domain. Humanization can be performed essentially following the method of Winter and co-workers, Jones et al., *Nature*, 321:522-525 (1986); Riechmann et al., *Nature*, 332:323-327 (1988); Verhoeven et al., *Science*, 239:1534-1536 (1988), by substituting rodent CDRs or CDR sequences for the corresponding sequences of a human antibody. Accordingly, such humanized antibodies are chimeric antibodies, U.S. Pat. No. 4,816,567, wherein substantially less than an intact human variable domain has been substituted by the corresponding sequence from a non-human species. In practice, humanized antibodies are typically human antibodies in which some CDR residues and possibly some FR residues are substituted by residues from analogous sites in rodent antibodies.

**[201]** The choice of human variable domains, both light and heavy, to be used in making humanized antibodies is very important to reduce antigenicity. According to the so-called "best-fit" method, the sequence of the variable domain of a rodent antibody is screened against the entire library of known human variable-domain sequences. The human sequence that is closest to that of the rodent is then accepted as the human framework (FR) for the humanized antibody. Sims et al., *J. Immunol.*, 151:2296 (1993); Chothia and Lesk, *J. Mol. Biol.*, 196:901 (1987). Another method uses a particular framework derived from the consensus sequence of all human antibodies of a particular subgroup of light or heavy chains.

The same framework may be used for several different humanized antibodies. Carter et al., Proc. Natl. Acad. Sci. USA, 89:4285 (1992); Presta et al., J. Immunol., 151:2623 (1993).

[202] It is typically desirable that antibodies be humanized with retention of high affinity for the antigen and other favorable biological properties. To achieve this goal, according to one method, humanized antibodies are prepared by a process of analysis of the parental sequences and various conceptual humanized products using three-dimensional models of the parental and humanized sequences. Three-dimensional immunoglobulin models are commonly available and are familiar to those skilled in the art. Computer programs are available that illustrate and display probable three-dimensional conformational structures of selected candidate immunoglobulin sequences. Inspection of these displays permits analysis of the likely role of the residues in the functioning of the candidate immunoglobulin sequence, *e.g.*, the analysis of residues that influence the ability of the candidate immunoglobulin to bind antigen. In this way, FR residues can be selected and combined from the consensus and import sequences so that the desired antibody characteristic, such as increased affinity for the target antigen(s), is achieved. In general, CDR residues are directly and most substantially involved in influencing antigen binding.

[203] It is also possible to produce transgenic animals (*e.g.*, mice) that are capable, upon immunization, of producing a full repertoire of human antibodies in the absence of endogenous immunoglobulin production. For example, it has been described that the homozygous deletion of the antibody heavy-chain joining region (J<sub>H</sub>) gene in chimeric and germ-line mutant mice results in complete inhibition of endogenous antibody production. Transfer of the human germ-line immunoglobulin gene array in such germ-line mutant mice will result in the production of human antibodies upon antigen challenge. *See, e.g.*, Jakobovits et al., Proc. Natl. Acad. Sci. USA, 90:2551-255 (1993); Jakobovits et al., Nature, 362:255-258 (1993); Bruggemann et al., Year Immuno., 7:33 (1993). Human antibodies can also be produced in phage-display libraries, Hoogenboom and Winter, J. Mol. Biol., 227:381 (1991); Marks et al., J. Mol. Biol., 222:581 (1991).

#### (iv) Antibody Fragments

[204] **ANTIBODY FRAGMENTS:**

[205] Various techniques have been developed for the production of antibody fragments. Such fragments can be derived via proteolytic digestion of intact antibodies, *see, e.g.*,

Morimoto et al., J. Biochem. Biophys. Meth. 24:107-117 (1992) and Brennan et al., Science, 229:81 (1985). Fragments can also be produced directly by recombinant host cells. For example, antibody fragments can be isolated from antibody phage libraries discussed above. Fab'-SH fragments can be directly recovered from *E. coli* and chemically coupled to form F(ab')<sub>2</sub> fragments, Carter et al., Biotechnology 10:163-167 (1992). F(ab')<sub>2</sub> fragments can be isolated directly from recombinant host cell culture. Other techniques for the production of antibody fragments will be apparent to the skilled practitioner.

#### (v) Bispecific Antibodies

##### 10 [206] **BISPECIFIC ANTIBODIES GENERALLY:**

[207] Bispecific antibodies (BsAbs) are antibodies that have binding specificities for at least two different antigens. Bispecific antibodies can be derived from full-length antibodies or from antibody fragments, e.g., F(ab')<sub>2</sub> bispecific antibodies.

[208] Methods for making bispecific antibodies are known in the art. Traditional  
15 production of full-length bispecific antibodies is based on the coexpression of two immunoglobulin heavy chain-light chain pairs, where the two chains have different specificities, Millstein and Cuello, Nature, 305:537-539 (1983). Because of the random assortment of immunoglobulin heavy and light chains, these hybridomas (quadromas) produce a mixture of potentially 10 different antibody molecules, of which only one has the  
20 correct bispecific structure. Purification of the correct molecule, which is usually accomplished by affinity chromatography steps, is rather cumbersome, and the product yields are low. Similar procedures are disclosed in WO 93/08829, and in Traunecker et al., E.M.B.O. J., 10:3655-3659 (1991).

[209] According to another approach, antibody variable domains containing the desired  
25 binding specificities (antibody-antigen combining sites) are fused to immunoglobulin constant domain sequences. The fusion is preferably with an immunoglobulin heavy chain constant domain, comprising at least part of the hinge, C<sub>H</sub> 2, and C<sub>H</sub> 3 regions. It is preferred to have the first heavy-chain constant region (C<sub>H</sub> 1) containing the site necessary for light chain binding, present in at least one of the fusions. DNAs encoding the immunoglobulin  
30 heavy chain fusions and, if desired, the immunoglobulin light chain, are inserted into separate expression vectors, and are co-transfected into a suitable host organism. This provides for great flexibility in adjusting the mutual proportions of the three polypeptide fragments in

embodiments when unequal ratios of the three polypeptide chains used in the construction provide the improved yields. It is, however, possible to insert the coding sequences for two or all three polypeptide chains in one expression vector when the expression of at least two polypeptide chains in equal ratios results in high yields or when the ratios are of no particular significance.

**[210] ANTIBODIES - HYBRID IMMUNOGLOBULIN HEAVY CHAIN:**

**[211]** In one embodiment of this approach, the bispecific antibodies are composed of a hybrid immunoglobulin heavy chain with a first binding specificity in one arm, and a hybrid immunoglobulin heavy chain-light chain pair (providing a second binding specificity) in the other arm. This asymmetric structure may facilitate the separation of the desired bispecific compound from unwanted immunoglobulin chain combinations, as the presence of an immunoglobulin light chain in only one half of the bispecific molecule provides for a facile method of separation. This approach is discussed in WO 94/04690. For further details of generating bispecific antibodies see, for example, Suresh et al., Meth. Enzymol., 121:210 (1986).

**[212] ANTIBODIES - CROSS-LINKED OR "HETEROCONJUGATE":**

**[213]** Bispecific antibodies include cross-linked or "heteroconjugate" antibodies. For example, one of the antibodies in the heteroconjugate can be coupled to avidin, the other to biotin. Such antibodies have, for example, been proposed to target immune system cells to unwanted cells, U.S. Pat. No. 4,676,980), and for treatment of HIV infection, WO 91/00360, WO 92/200373, and EP 03089). Heteroconjugate antibodies may be made using any convenient cross-linking methods. Suitable cross-linking agents are well known in the art, and are disclosed in U.S. Pat. No. 4,676,980, along with a number of cross-linking techniques.

**[214] ANTIBODIES - DIABODIES:**

**[215]** The "diabody" technology described by Hollinger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993) has provided an alternative mechanism for making BsAb fragments. The fragments comprise a heavy-chain variable domain ( $V_H$ ) connected to a light-chain variable domain ( $V_L$ ) by a linker that is too short to allow pairing between the two domains on the same chain. Accordingly, the  $V_H$  and  $V_L$  domains of one fragment are forced to pair with the complementary  $V_L$  and  $V_H$  domains of another fragment, thereby forming two antigen-binding sites.

[216] Another strategy for making BsAb fragments by the use of single-chain Fv (sFv) dimers has also been reported. See Gruber et al., J. Immunol., 152:5368 (1994). These researchers designed an antibody comprising the V<sub>H</sub> and V<sub>L</sub> domains of a first antibody joined by a 25-amino-acid-residue linker to the V<sub>H</sub> and V<sub>L</sub> domains of a second antibody.

5 The refolded molecule bound to fluorescein and the T-cell receptor and redirected the lysis of human tumor cells that had fluorescein covalently linked to their surface.

[217] **ANTIBODIES - OTHER:**

[218] Techniques for generating bispecific antibodies from antibody fragments have also been described in the literature. For example, bispecific antibodies can be prepared using chemical linkage. Brennan et al., Science, 229:81 (1985) describe a procedure wherein intact antibodies are proteolytically cleaved to generate F(ab')<sub>2</sub> fragments. These fragments are reduced in the presence of the dithiol complexing agent sodium arsenite to stabilize vicinal dithiols and prevent intermolecular disulfide formation. The Fab' fragments generated are then converted to thionitrobenzoate (TNB) derivatives. One of the Fab'-TNB derivatives is then reconverted to the Fab'-thiol by reduction with mercaptoethylamine and is mixed with an equimolar amount of the other Fab'-TNB derivative to form the BsAb. The BsAbs produced can be used as agents for the selective immobilization of enzymes.

[219] Fab'-SH fragments can be directly recovered from *E. coli*, which can be chemically coupled to form bispecific antibodies. Shalaby et al., J. Exp. Med., 175:217-225 (1992) describe the production of a fully humanized BsAb F(ab')<sub>2</sub> molecule. Each Fab' fragment was separately secreted from *E. coli* and subjected to directed chemical coupling *in vitro* to form the BsAb. The BsAb thus formed was able to bind to cells overexpressing the HER2 receptor and normal human T cells, as well as trigger the lytic activity of human cytotoxic lymphocytes against human breast tumor targets. See also Rodriguez et al., Int. J. Cancers (Suppl.) 7:45-50 (1992).

[220] Various techniques for making and isolating BsAb fragments directly from recombinant cell culture have also been described. For example, bispecific F(ab')<sub>2</sub> heterodimers have been produced using leucine zippers. Kostelny et al., J. Immunol., 148(5):1547-1553 (1992). The leucine zipper peptides from the Fos and Jun proteins are linked to the Fab' portions of two different antibodies by gene fusion. The antibody homodimers are reduced at the hinge region to form monomers and then re-oxidized to form the antibody heterodimers.

b. Antibody Purification

**[221] ANTIBODY PURIFICATION GENERALLY:**

**[222]** When using recombinant techniques, the antibody can be produced intracellularly, in the periplasmic space, or directly secreted into the medium. If the antibody is produced intracellularly, as a first step, the particulate debris, either host cells or lysed fragments, is removed, for example, by centrifugation or ultrafiltration. Carter et al., *Bio/Technology* 10:163-167 (1992), describe a procedure for isolating antibodies which are secreted to the periplasmic space of *E. coli*. Briefly, cell paste is thawed in the presence of sodium acetate (pH 3.5), EDTA, and phenylmethylsulfonylfluoride (PMSF) over about 30 min. Cell debris can be removed by centrifugation. Where the antibody is secreted into the medium, supernatants from such expression systems are generally first concentrated using a commercially available protein concentration filter, for example, an Amicon or Millipore Pellicon ultrafiltration unit. A protease inhibitor such as PMSF may be included in any of the foregoing steps to inhibit proteolysis and antibiotics may be included to prevent the growth of adventitious contaminants.

**[223] BEFORE LPHIC:**

**[224]** The antibody composition prepared from the cells is preferably subjected to at least one purification step prior to LPHIC. Examples of suitable purification steps include hydroxyapatite chromatography, gel electrophoresis, dialysis, and affinity chromatography. The suitability of protein A as an affinity ligand depends on the species and isotype of any immunoglobulin Fc domain that is present in the antibody. Protein A can be used to purify antibodies that are based on human  $\gamma 1$ ,  $\gamma 2$ , or  $\gamma 4$  heavy chains, Lindmark et al., *J. Immunol. Meth.* 62:1-13 (1983). Protein G has been recommended for mouse isotypes and for human  $\gamma 3$ , Guss et al., *E.M.B.O. J.*, 5:1567-1575 (1986). The matrix to which the affinity ligand is attached is often agarose, but other matrices are available. Mechanically stable matrices such as controlled pore glass or poly(styrenedivinyl)benzene allow for faster flow rates and shorter processing times than can be achieved with agarose. Where the antibody comprises a  $C_H 3$  domain, the Bakerbond ABX<sup>TM</sup> resin (J. T. Baker, Phillipsburg, N.J.) is useful for purification. Other techniques for protein purification such as fractionation on an ion-exchange column, ethanol precipitation, Reverse Phase HPLC, chromatography on silica, chromatography on heparin SEPHAROSE<sup>TM</sup>, chromatography on an anion or cation

exchange resin (such as a polyaspartic acid column), chromatofocusing, SDS-PAGE, and ammonium sulfate precipitation are also available depending on the antibody to be recovered.

**[225] LPHIC:**

**[226]** Following any preliminary purification step(s), the mixture comprising the antibody of interest and contaminant(s) can be subjected to LPHIC. See US Patent No. 6,214,984. Often, the antibody composition to be purified will be present in a buffer from the previous purification step. However, it may be necessary to add a buffer to the antibody composition prior to the LPHIC step. Many buffers are available and can be selected by routine experimentation. The pH of the mixture comprising the antibody to be purified and at least one contaminant in a loading buffer is adjusted to a pH of about 2.5-4.5 using either an acid or base, depending on the starting pH. The loading buffer can have a low salt concentration (e.g., less than about 0.25 M salt).

**[227]** The mixture is loaded on the HIC column. HIC columns normally comprise a base matrix (e.g., cross-linked agarose or synthetic copolymer material) to which hydrophobic ligands (e.g., alkyl or aryl groups) are coupled. One example of an HIC column comprises an agarose resin substituted with phenyl groups (e.g., a Phenyl SEPHAROSE<sup>TM</sup> column). Many HIC columns are available commercially. Examples include, but are not limited to, Phenyl SEPHAROSE 6 FAST FLOW<sup>TM</sup> column with low or high substitution (Pharmacia LKB Biotechnology, AB, Sweden); Phenyl SEPHAROSE<sup>TM</sup> High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); Octyl SEPHAROSE<sup>TM</sup> High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); FRACTOGEL<sup>TM</sup> EMD Propyl or FRACTOGEL<sup>TM</sup> EMD Phenyl columns (E. Merck, Germany); MACRO-PREP<sup>TM</sup> Methyl or MACRO-PREP<sup>TM</sup> t-Butyl Supports (Bio-Rad, California); WP HI-Propyl (C<sub>3</sub>)<sup>TM</sup> column (J. T. Baker, New Jersey); and TOYOPEARL<sup>TM</sup> ether, phenyl, or butyl columns (TosoHaas, PA).

**[228]** The antibody is typically eluted from the column using an elution buffer that is the same as the loading buffer. The elution buffer can be selected using routine experimentation in view of the present application. The pH of the elution buffer may be between about 2.5-4.5 and have a low salt concentration (e.g., less than about 0.25 M salt). It may not be necessary to use a salt gradient to elute the antibody of interest; the desired product may be recovered in the flow-through fraction that does not bind significantly to the column.



[229] The LPHIC step provides a way to remove a correctly folded and disulfide bonded antibody from unwanted contaminants (*e.g.*, incorrectly associated light and heavy fragments). The method can provide an approach to substantially remove an impurity characterized as a correctly folded antibody fragment whose light and heavy chains fail to associate through disulfide bonding. Antibody compositions prepared using LPHIC can be up to about 95% pure or more. Purities of more than about 98% have been reported. US Patent No. 6,214,984.

[230] **POST LPHIC:**

[231] Antibody compositions prepared by LPHIC can be further purified as desired using techniques which are well known in the art. Diagnostic or therapeutic formulations of the purified protein can be made by providing the antibody composition in a physiologically acceptable carrier, examples of which are provided below. To remove contaminants (*e.g.*, unfolded antibody and incorrectly associated light and heavy fragments) from the HIC column so that it can be re-used, a composition including urea (*e.g.*, 6.0 M urea, 1% MES buffer pH 6.0, 4 mM ammonium sulfate) can be flowed through the column.

c. Some Uses For Antibodies Described Herein

(i) Generally

[232] **GENERALLY:**

[233] The present invention comprises any suitable use for the antibodies and other binding partners discussed herein. The following provides some of the desired uses, including diagnostic and therapeutic uses. Various diagnostic and therapeutic uses for antibodies have been reviewed in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.* 53:189-204 (1990); and, Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)* 50(8):901-909 (1990), for example.

[234] **ASSAYS:**

[235] The antibodies can be used in immunoassays, such as enzyme immunoassays. BsAbs can be useful for this type of assay; one arm of the BsAb can be designed to bind to a specific epitope on the enzyme so that binding does not cause enzyme inhibition, the other arm of the antibody can be designed to bind to an immobilizing matrix ensuring a high enzyme density at the desired site. Examples of such diagnostic BsAbs include those having

specificity for IgG as well as ferritin, and those having binding specificities for horseradish peroxidase (HRP) as well as a hormone, for example. Monoclonal and polyclonal antibodies are also exemplary antibodies for immunoassays.

[236] The antibodies can be designed for use in two-site immunoassays. For example, 5 two antibodies are produced binding to two separate epitopes on the analyte protein; one antibody binds the complex to an insoluble matrix, the other binds an indicator enzyme.

[237] **DIAGNOSTIC USES:**

[238] Antibodies can also be used for immunodiagnosis, *in vitro* or *in vivo* or otherwise, of various diseases or conditions based on the presence or absence of a particular GPCR. 10 Such diseases and conditions include, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, 15 osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne 20 muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, 25 Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, 30 chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and

cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

- 5 [239] To facilitate this diagnostic use, an antibody that binds a particular GPCR, when such is differentially expressed in tumors or other target diseases, can be conjugated with a detectable marker (*e.g.*, a chelator that binds a radionuclide). Examples of tumor-associated antigens being used in a similar fashion include an antibody having specificity for the tumor-associated antigen CEA used for imaging colorectal and thyroid carcinomas and the anti-  
10 p185<sup>HER2</sup> antibody used for detecting cancers characterized by amplification of the HER2 protooncogene. Other uses for the antibodies of the present invention will be apparent to the skilled practitioner in view of the present application.

#### (ii) Assays

##### 15 [240] ASSAYS:

- [241] For certain applications such as some diagnostic and other assay applications, the antibody typically can be labeled directly or indirectly with a detectable moiety. The detectable moiety can be any moiety that is capable of producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as <sup>3</sup>H,  
20 <sup>14</sup>C, <sup>32</sup>P, <sup>35</sup>S, or <sup>125</sup>I; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or HRP.

- [242] Any method known in the art for separately conjugating the antibody to the detectable moiety may be employed, including those methods described by Hunter et al.,  
25 Nature, 144:945 (1962); David et al., Biochemistry, 13:1014 (1974); Pain et al., J. Immunol. Meth. 40:219 (1981); and, Nygren, J. Histochem. and Cytochem. 30:407 (1982).

- [243] The antibodies of the present invention may be employed in any desired assay method, such as competitive binding assays, direct, and indirect sandwich assays, and immunoprecipitation assays. Zola, Monoclonal Antibodies: A Manual of Techniques, pp.  
30 147-158 (CRC Press, Inc. (1987)).

##### [244] COMPETITIVE BINDING ASSAYS:

[245] Competitive binding assays rely on the ability of a labeled standard to compete with the test sample analyte for binding with a limited amount of antibody. The amount of analyte in the test sample is inversely proportional to the amount of standard that becomes bound to the antibody. To facilitate determining the amount of standard that becomes bound, the  
5 antibody generally is insolubilized before or after the competition, so that the standard, and analyte that are bound to the antibody may conveniently be separated from the standard, and analyte which remain unbound.

[246] BsAbs are particularly useful for sandwich assays which involve the use of two molecules, each capable of binding to a different immunogenic portion, or epitope, of the  
10 sample to be detected. In a sandwich assay, the test sample analyte is bound by a first arm of the antibody which is immobilized on a solid support, and thereafter a second arm of the antibody binds to the analyte, thus forming an insoluble three part complex. *See, e.g.*, U.S. Pat. No. 4,376,110. The second arm of the antibody may itself be labeled with a detectable moiety (direct sandwich assays) or may be measured using an anti-immunoglobulin antibody  
15 that is labeled with a detectable moiety (indirect sandwich assay). For example, one type of sandwich assay is an ELISA assay, in which case the detectable moiety is an enzyme. Assays are discussed further elsewhere herein in relation to binding partners such as antibodies, and antigenic peptides for particular GPCRs, including assays searching for or using such antigenic peptides, and would be apparent to those skilled in the art in view of the present  
20 application.

### (iii) Affinity Purification

#### [247] AFFINITY PURIFICATION:

[248] The antibodies also are useful for the affinity purification of an antigen of interest  
25 such as a particular GPCR from sources such as recombinant cell culture or natural sources.

### (iv) Therapeutics

#### [249] THERAPEUTIC USES:

[250] Therapeutic compositions, and uses, etc., for the antibodies described herein will  
30 now be discussed. As with other parts of this application, this section does not contain the entire discussion of therapeutic uses or compositions, etc., for antibodies; other sections discuss both antibodies, and therapeutics, and the discussion in this section applies to certain

other aspects discussed herein. Turning to antibodies and therapeutics, the antibodies can be used, for example, for redirected cytotoxicity (*e.g.*, to kill tumor cells), as a vaccine adjuvant, for delivering thrombolytic agents to clots, for delivering immunotoxins to tumor cells, for converting enzyme activated prodrugs at a target site (*e.g.*, a tumor), for treating infectious diseases or targeting immune complexes to cell surface receptors.

**[251] THERAPEUTIC FORMULATIONS:**

**[252]** Therapeutic formulations of the antibody can be prepared for storage by mixing the antibody having the desired degree of purity with optional physiologically acceptable carriers, excipients, or stabilizers (Remington's Pharmaceutical Sciences, 16th edition, Osol, A., Ed. (1980), for example in the form of lyophilized cake or aqueous solutions. Acceptable carriers, excipients, or stabilizers are nontoxic to recipients at the dosages, and concentrations employed, and include buffers such as phosphate, citrate, and other organic acids; antioxidants including ascorbic acid; low molecular weight (less than about 10 residues) polypeptides; proteins, such as serum albumin, gelatin, or immunoglobulins; hydrophilic polymers such as polyvinylpyrrolidone; amino acids such as glycine, glutamine, asparagine, arginine, or lysine; monosaccharides, disaccharides, and other carbohydrates including glucose, mannose, or dextrans; chelating agents such as EDTA; sugar alcohols such as mannitol or sorbitol; salt-forming counterions such as sodium; or nonionic surfactants such as Tween, Pluronic, or polyethylene glycol (PEG).

**[253]** The antibodies also may be entrapped in microcapsules prepared, for example, by coacervation techniques or by interfacial polymerization (for example, hydroxymethylcellulose or gelatin-microcapsules, and poly-[methylmethacrylate] microcapsules, respectively), in colloidal drug delivery systems (for example, liposomes, albumin microspheres, microemulsions, nano-particles, and nanocapsules), or in macroemulsions. Such techniques are disclosed in Remington's Pharmaceutical Sciences, *supra*.

**[254] THERAPEUTIC FORMULATIONS -STERILE:**

**[255]** An antibody to be used for *in vivo* human administration should be sterile. This can be accomplished by filtration through sterile filtration membranes, for example prior to or following lyophilization and reconstitution. The antibody ordinarily will be stored in lyophilized form or in solution. Therapeutic antibody compositions generally are placed into

a container having a sterile access port, for example, an intravenous solution bag or vial having a stopper pierceable by a hypodermic injection needle.

**[256] THERAPEUTIC ADMINISTRATIONS:**

**[257]** The route of antibody administration is in accord with known methods, *e.g.*,  
5 injection or infusion by intravenous, intraperitoneal, intracerebral, intramuscular, intraocular, intraarterial, or intralesional routes, or by sustained release systems as noted below.

**[258]** The antibody can be administered, for example, continuously by infusion or by bolus injection. Suitable examples of sustained-release preparations include semipermeable matrices of solid hydrophobic polymers containing the protein, which matrices are in the  
10 form of shaped articles, *e.g.*, films, or microcapsules. Examples of sustained-release matrices include polyesters, hydrogels (*e.g.*, poly(2-hydroxyethyl-methacrylate) as described by Langer et al., J. Biomed. Mater. Res., 15:167-277 (1981), and Langer, Chem. Tech., 12:98-105 (1982), or poly(vinylalcohol)), polylactides, U.S. Pat. No. 3,773,919; EP 58,481, copolymers of L-glutamic acid and gamma ethyl-L-glutamate, Sidman et al., Biopolymers,  
15 22:547-556 (1983), non-degradable ethylene-vinyl acetate, Langer et al., *supra*, degradable lactic acid-glycolic acid copolymers such as the LUPRON DEPOT<sup>TM</sup> (injectable microspheres composed of lactic acid-glycolic acid copolymer and leuprolide acetate), and poly-D-(-)-3-hydroxybutyric acid, EP 133,988.

**[259] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-  
20 POLYMERS:**

**[260]** While polymers such as ethylene-vinyl acetate and lactic acid-glycolic acid sustain release of molecules for over 100 days, certain hydrogels release proteins for shorter time periods. When encapsulated antibodies remain in the body for a long time, they may denature or aggregate as a result of exposure to moisture at 37°C, resulting in a loss of  
25 biological activity and possible changes in immunogenicity. Rational strategies can be devised for antibody stabilization depending on the mechanism involved. For example, if the aggregation mechanism is discovered to be intermolecular S-S bond formation through thio-disulfide interchange, stabilization may be achieved by modifying sulfhydryl residues, lyophilizing from acidic solutions, controlling moisture content, using appropriate additives,  
30 and developing specific polymer matrix compositions.

**[261] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-LIPOSOMES:**

[262] Sustained-release antibody compositions also include liposomally entrapped antibody. Liposomes containing the antibody can be prepared by methods such as those in DE 3,218,121; Epstein et al., Proc. Natl. Acad. Sci. USA, 82:3688-3692 (1985); Hwang et al., Proc. Natl. Acad. Sci. USA, 77:4030-4034 (1980); EP 52,322; EP 36,676; EP 88,046; EP 143,949; EP 142,641; Japanese patent application 83-118008; U.S. Pat. Nos. 4,485,045 and 4,544,545; and EP 102,324. Ordinarily the liposomes are of the small (about 200-800 Angstroms) unilamellar type in which the lipid content is greater than about 30 mol. % cholesterol, the selected proportion being adjusted for the optimal antibody therapy.

[263] **THERAPEUTICALLY EFFECTIVE AMOUNT:**

10 [264] An effective amount of antibody to be employed therapeutically will depend, for example, upon the therapeutic objectives, the route of administration, and the condition of the patient. Accordingly, it will be necessary for the therapist to titer the dosage and modify the route of administration as required to obtain the optimal therapeutic effect. A typical daily dosage might range from about 1 µg/kg to up to 10 mg/kg or more, depending on the factors  
15 mentioned above. Typically, the clinician will administer antibody until a dosage is reached that achieves the desired effect. The progress of this therapy is easily monitored by conventional assays.

5. DRUG DESIGN BASED ON THE ANTIGENS HEREIN OR  
20 ANTIBODIES THERETO

[265] **DISEASE/CONDITIONS LIST:**

[266] The peptides and antibodies of the present invention can serve as valuable tools for designing drugs for treating various pathophysiological conditions such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-  
25 related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (e.g., osteoarthritis, osteoporosis), carcinoma (e.g., basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung  
30 small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne

muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved or that would be readily apparent to those skilled in the art in view of the present application.

## EXAMPLES

[267] The Examples below provide information as follows: Example 1 relates to the identification and selection of the antigens set forth in Figure 2. Examples 2 to 4 relate to antibody production and purification based on such antigens. Examples 5 to 10 relate to H&E staining. And, Example 11 relates to Western blot analyses.

### EXAMPLE 1: SELECTION OF ANTIGENS

[268] Antigenic peptides were derived from the amino acid sequence of a particular GPCR based on analyses of likely antigen-containing regions and specificity of those regions for the protein/gene of interest. The specificity of the antigen peptides (approximately 20 amino acids in length) for antibody generation was determined using the outlined techniques, including BLAST of several public databases. These public databases included but were not limited to GenBank, Swiss Prot Human, Swiss Prot NonHuman, GenPeptH, GenPept M, and



LifeSpan's proprietary databases. With respect to specificity, parameters that precluded the use of a particular peptide included the presence of 6 or more contiguous amino acids with sequence identity to protein(s) other than the protein of interest, the presence of sites of posttranslational modification, including phosphorylation and glycosylation, and highly hydrophobic sequences, which could indicate potential *in situ* localization within the plasma membrane. The peptides were analyzed for antigenicity using the published algorithm of Hopp, T. P., and Woods, K. R, Proc. Natl. Acad. Sci. U.S.A. 78, 3824-3828, (1981). Additional considerations in antigenic peptide design included 1) selection against sequences with multiple prolines in a row, 2) selection against sequences with multiple serines in a row, 3) selection against sequences with multiple lysines in a row, 4) selection against sequences with multiple arginines in a row 5) selection against sequences with multiple aspartic acids in a row, 6) selection against sequences with multiple glutamic acids in a row, 7) selection against peptides containing methionine or tryptophan, which can become oxidized as a result of the cyclization reaction, and 8) avoidance of stretches of 5 or more amino acids having no uncharged amino acids (which also resulted in a desirable charge to peptide length ratio of at least 1 charge:5 residues). The selected antigenic peptides are set forth in the Sequence Listing and in Figure 2.

#### EXAMPLE 2: ANTIBODY PRODUCTION SCHEDULE

- [269] Day 0 - Pre-immune serum collection (approximately 5.0 ml). Immunize using 200 µg antigen peptide per rabbit in Complete Freund's Adjuvant.
- [270] Day 14 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [271] Day 28 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [272] Day 42 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [273] Day 49 - First production bleed; obtain 24.0 - 26.0 ml.
- [274] Day 56 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [275] Day 63 - Second production bleed and ELISA analysis.

[276] Day 70 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.

[277] Day 77 - Third production bleed and affinity purification.

5                   EXAMPLE 3: IMMUNOSORBENT PURIFICATION OF ANTISERUM:  
                  COUPLING OF PEPTIDE TO CNBR-ACTIVATED SEPHAROSE 4B

[278] Weigh out 0.8 g of CNBr-activated Sepharose 4B (2.5 ml of final gel volume). Wash and re-swell on sintered glass filter with 1 mM HCl, followed by coupling buffer (0.1 M NaHCO<sub>3</sub>, 0.25 M NaCl, pH 8.5). Dissolve 10 mg of protein or peptide in coupling buffer.  
10 Mix protein solution with gel suspension and incubate 2 hours at room temperature or overnight at 4°C. Block remaining active groups with 0.2 M glycine buffer, pH 8.1. Wash away excess adsorbed protein with coupling buffer, followed by 0.1 M acetate buffer containing 0.5 M NaCl, pH 4.3. Equilibrate the column with phosphate-buffered saline (PBS), pH 7.7.

15                   EXAMPLE 4: IMMUNOSORBENT PURIFICATION OF ANTISERUM:  
                  AFFINITY PURIFICATION OF ANTISERUM

[279] Dilute 10 ml of clear antiserum 1:1 with PBS, pH 7.7, apply to affinity column at a flow rate of 0.3 ml/minute, and monitor absorbance of eluate at 280 nm. Collect fractions of  
20 unbound material and rinse column with PBS, pH 7.7. Elute bound antibody with 0.2 M glycine, pH 1.85, and collect eluate until absorbance at 280 nm returns to baseline. Neutralize all collected fractions with 1 M Tris-HCl, pH 8.5 immediately after collection. Determine OD at 280 nm, and determine the total OD recovered. Conduct ELISA analysis with the corresponding antigen to confirm the presence and identity of recovered antibody  
25 and the removal of all antibody from the original serum. Concentrate antibody to approximately 2.0 mg/ml and dialyze against PBS with 0.01% NaN<sub>3</sub>.

                  EXAMPLE 5: PREPARATION OF ANTIBODY DILUTIONS

[280] The purpose of this protocol is to dilute antibodies in solution. Materials include  
30 Tris-HCL Buffer with carrier protein and 0.015 M NaN<sub>3</sub> (Dako Antibody Diluent #S0809 (DAKO, Carpinteria, CA); vials containing the antibodies described above or commercial antibodies against the particular GPCR; pipetmen and disposable tips; container of chopped ice; 12 ml Dako reagent tubes; and, reagent tube rack.

[281] The procedure is a) calculate proportions of antibody and diluent according to desired concentrations and volume requirements; b) label reagent tubes and place in rack; c) pipette needed volume of diluent into tube(s); d) place vials of antibodies into ice; e) invert and/or flick antibody vial(s) 3 or 4 times to insure suspension; f) pipette required volume of antibody(s) into corresponding diluent volumes; and, g) mix gently.

#### EXAMPLE 6: PREPARATION OF AUTOSTAINER SOLUTIONS

[282] The purpose of this protocol is the preparation of concentrated solutions for use in a DAKO autostainer. Materials include DAKO® TBST (Tris Buffered Saline Containing Tween-S3306), 10X Concentrate, DAKO® Target Retrieval Solution, 10x Concentrate (S1699), deionized H<sub>2</sub>O, 20L container, with lid, marked at the 10L level, DAKO® TBS (Tris Buffered Saline-S1968), and DAKO Tween® (S1966).

[283] The procedure to make TBST 10x Concentrate is a) pour 2 500 ml bottles DAKO® TBST into a 20 L container, b) add deionized H<sub>2</sub>O until solution level is at 10 L mark, c) replace lid and shake 10 to 20 times, d) pour diluted DAKO® TBST into autostainer carboy(s) as designated. The procedure to make Target Retrieval Solution is a) measure 135 ml of deionized H<sub>2</sub>O and pour into slide bath, b) measure 15 ml of DAKO® Target Retrieval solution, c) add to H<sub>2</sub>O, and d) agitate. This solution is then used in the steam method of target retrieval, Example 9, below. The procedure to make TBS is a) fill 20L container to 10L mark with deionized H<sub>2</sub>O, b) add 2 envelopes of DAKO® TBS, c) add 5 ml of DAKO TWEEN®, and d) replace lid and agitate 10 to 20 times.

#### EXAMPLE 7: PREPARATION OF SOLUTIONS FOR ANTIBODY DETECTION

[284] Solutions for antibody detection are prepared using Vector® Biotinylated antibody (BA series), Vectastain® ABC-AP Kit (AK-5000), 10 mM sodium phosphate, pH 7.5, 0.9% saline (PBS), Vector® Red Alkaline Phosphatase Substrate Kit I (SK-5100), and 100 mM Tris-HCl, pH 8.2 Buffer. To prepare biotinylated antibody, add 10 ml of PBS to reagent tube, add 1 drop biotinylated antibody to the PBS, then mix gently. To prepare ABC, to 10 ml of PBS, add 2 drops each of Reagent A and Reagent B, mix immediately, then allow to stand 30 minutes before use. To prepare AP Red, which should be prepared immediately

before use, to 5 ml of Tris-HCl buffer, add 2 drops of Reagent 1 and mix well, add 2 drops of Reagent 2 and mix well, then add 2 drops of Reagent 3 and mix well.

#### EXAMPLE 8: DEPARAFFINIZATION AND REHYDRATION OF SAMPLES

5 [285] The purpose of this protocol is to remove paraffin from and rehydrate preserved tissues in preparation for IHC procedures. Materials and equipment include fume hood, vertical slide rack(s), three xylene (VWR #72060-088) baths, three 100% alcohol blend (VWR #72060-050) baths, two 95% alcohol blend (VWR #72060-052) baths, one 70%  
10 alcohol blend (VWR #72060-056) bath, and Tris-Buffered Saline (DAKO® S1968) + Tween® (DAKO S1966).

[286] Insert the slides into the vertical rack(s). Move slides through baths inside fume hood as follows:

15 Xylene 5 Minutes  
Xylene 5 Minutes  
Xylene 5 Minutes  
100% Alcohol 2 Minutes  
100% Alcohol 2 Minutes  
100% Alcohol 1 Minute  
20 95% Alcohol 2 Minutes  
95% Alcohol 2 Minutes  
70% Alcohol 1 Minute

[287] Finally, place slides into a container with TBST.

#### 25 EXAMPLE 9: STEAM METHOD OF TARGET RETRIEVAL

[288] The purpose of this protocol is to optimize antibody binding within paraffin embedded tissues. Materials and equipment included a steamer, deionized H<sub>2</sub>O, target retrieval solution, 10X concentrate (DAKO #S1699), 250 ml graduated cylinder, 15 ml graduated cylinder, staining dish(es), and deparaffinized and rehydrated tissue on microscope  
30 slides in immersed TBST. The procedure is to a) fill the steamer with deionized H<sub>2</sub>O to appropriate depth as indicated, b) turn the steamer on, c) in a graduated cylinder, measure 135ml of deionized H<sub>2</sub>O and pour into staining dish(es), d) pipette 15ml of target retrieval solution and release into deionized H<sub>2</sub>O, e) place the staining dish(es) into the basket of the steamer and heat for at least 10 minutes to preheat, f) add rack(s) containing tissue slides to  
35 heated target retrieval solution, g) cover and steam for 20 minutes, h) remove container from

steamer and let stand at room temperature for 20 minutes, i) transfer rack(s) with slides to container(s) of TBST, and j) slides are now ready for staining procedures.

#### EXAMPLE 10: ANTIBODY DETECTION

- 5 [289] The deparaffinized, rehydrated, and steamed (if needed) slides are loaded onto racks within a DAKO autostainer and then the autostainer is run according to the manufacturer's instructions. The slides are removed and the autostainer is turned off.

#### EXAMPLE 11: WESTERN BLOTTING

- 10 [290] The purpose of this protocol is to visualize the immunoreactivity of the antibodies described above against the particular GPCR on a western blot. Materials and equipment included western blot membrane, TBS Tween (TBST: 100 mM Tris-HCl pH 7.5, 150 mM NaCl, 0.1% Tween<sup>TM</sup> 20), 5% non-fat dried milk in TBST (blotto), antibody of interest (primary), peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) (secondary) –  
15 Jackson ImmunoResearch, ECL solution (Amersham Biosciences, Uppsala Sweden), film, developer D-19, fixer, rocking platform.

- [291] During the blotting procedure, the blot is kept wet at all times and on a substantially level surface. The Western blot is placed right-side up in 10 ml of blotto. The membrane is flipped over and the dish rocked so that the solution covered it. The membrane is then  
20 flipped back to the right side and solution is again rocked over it. The blot is then placed on a shaker for at least 1 hour. Ten ml of primary antibody are prepared by diluting 1:500 in blotto.

- [292] The blotto is removed from the Western blot and replaced with the primary antibody. The blot is flipped again and placed on the shaker for 1 hour. Secondary antibody  
25 and peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) are prepared 1:20,000 in 10 ml of blotto. The primary antibody is removed and the Western blot is washed 3 times with 10 ml of blotto. The blotto is removed and replaced with the secondary antibody solution. The blot is flipped and placed on the shaker for 1 hour. The secondary antibody is removed and the blot washed 2 times with 10 ml of blotto. The blotto is removed and the blot is  
30 washed 2 times with 10 ml TBST. ECL is prepared by combining equal amounts of Solution 1 and 2.

[293] The blotto is removed and 1 ml of ECL is placed on the blot. The blot is flipped and let sit for 1 minute. The blot is placed on plastic wrap and immediately covered with plastic wrap. The ECL is pressed out. The blot is placed on the film, then the film is developed.

5

[294] From the foregoing, it will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without deviating from the spirit and scope of the invention. Accordingly, the invention includes all permutations and combinations of the subject matter set forth herein

10 and is not limited except as by the appended claims.

## WHAT IS CLAIMED IS:

1. An isolated antigenic peptide according to any one of SEQ ID NOS. 692-2292.
- 5 2. An isolated antigenic peptide comprising an amino acid sequence that is at least about 90% identical to a sequence set forth in any one of SEQ ID NOS. 692-2292.
3. An isolated antigenic peptide that is an analog of an antigenic peptide according to any one of SEQ ID NOS. 692-2292.
4. An isolated antigenic peptide comprising a short antigenic amino acid  
10 sequence that is identical to at least 5 consecutive amino acids set forth in any one of SEQ ID NOS. 692-2292.
5. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any one of SEQ ID NOS. 692-  
15 2292.
6. A kit for the detection of antibodies against a particular GPCR in a sample comprising:
  - a) an isolated antigenic peptide according to any one of claims 1-5 and derived from the particular GPCR, and
  - 20 b) at least one of a reagent or a device for detecting the antibodies.
7. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151,  
25 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187,  
30 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.
8. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is at least about 90% identical to any

one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using the peptide sequence that is  
5 at least about 90% identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

9. An isolated antibody having high specificity and high affinity or avidity for a  
10 particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the  
15 peptide sequence that is the analog to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

10. An isolated antibody having high specificity and high affinity or avidity for a  
20 particular GPCR comprising a peptide sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced  
25 using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

30 11. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,



1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955,  
 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270,  
 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

12. An isolated antibody specific for a particular GPCR comprising a peptide  
 15 sequence that is at least about 90% identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679,  
 20 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using the peptide sequence that is at least about 90% identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086,  
 25 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 13. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is the analog to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

14. An isolated antibody specific for a particular GPCR comprising a peptide 15 sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 20 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 25 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 15. A kit for the detection of antibodies against the particular GPCR of claim 5 comprising:

a) an isolated antibody according to any one of claims 7-14, and

b) at least one of a reagent or a device for detecting the antibody.

16. An assay for the detection of a particular GPCR in a sample, comprising:

a) providing an isolated antigenic peptide according to any one of claims 1-5,

b) contacting the isolated antigenic peptide with the sample under conditions suitable  
5 and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific  
for the particular GPCR present in the sample, to provide an antibody-bound antigenic  
peptide, and

c) detecting the antibody-bound antigenic peptide, and therefrom determining whether  
the sample contains the particular GPCR.

10 17. The assay of claim 16 further comprising the step of binding the isolated  
antigenic peptide or the antibody to a solid substrate.

18. The assay of claim 16 or 17 wherein the sample is an unpurified sample.

19. The assay of any one of claims 15-18 further comprising, prior to the  
contacting, obtaining the sample from a human being.

15 20. The assay of any one of claims 15-19 wherein the assay is selected from the  
group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a  
radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay  
(ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an  
immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an  
20 immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a  
biosensor assay, and a low-light detection assay.

21. An isolated nucleic acid molecule encoding an antigenic peptide according to  
any one of SEQ ID NOS. 692-2292.

22. The isolated nucleic acid molecule according to claim 21 wherein the  
25 molecule encodes a naturally occurring human antigenic peptide.

23. An isolated nucleic acid molecule encoding an antigenic peptide that is at least  
about 90% identical to any one of the antigenic peptides set forth in SEQ ID NOS. 692-2292.

24. The isolated nucleic acid molecule according to claim 23 wherein the  
antigenic peptide is at least about 95% identical to the antigenic peptide.

30 25. The isolated nucleic acid molecule according to claim 23 or 24 wherein the  
molecule encodes a naturally occurring human antigenic peptide.

26. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of SEQ ID NOS. 692-2292 to genomic DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

5        27. A method of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence wherein the antigenic peptide has a length of about 5 to about 100 amino acids, the method comprising:

      a) searching the candidate polypeptide sequence using a comparison window of the length, and

10        b) selecting against amino acid sequences of the length and having at least 3 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising  
15 no charged amino acids.

      28. The method of claim 27 wherein the method further comprises selecting against at least 5 of the characteristics.

      29. The method of claim 27 wherein the method further comprises selecting against at least 7 of the characteristics.

20        30. The method of claim 27 wherein the method further comprises selecting against the 9 characteristics.

      31. The method of any one of claims 27-30 wherein the method further comprises:

      c) selecting against amino acid sequences of the length and having at least one of the following additional characteristics 1) sequences having at least 5 consecutive amino  
25 acids that are identical to an alternative amino acid sequence from an alternative polypeptide that is different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences.

      32. The method of claim 31 wherein the posttranslational modification sites are phosphorylation or glycosylation sites.

30        33. The method of claim 31 or 32 wherein the method further comprises selecting against at least 2 of the additional characteristics.

34. The method of claim 31 or 32 wherein the method further comprises selecting against the 3 additional characteristics.

35. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

5 36. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST analysis for the candidate polypeptide sequence.

37. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 50 amino acids.

38. The method of any one of claims 27-36 wherein the antigenic peptide has a  
10 length from 6 amino acids to about 20 amino acids.

39. The method of any one of claims 27-36 wherein the antigenic peptide has a length of about 20 amino acids.

40. The method of any one of claims 27-39 wherein the polypeptide is a protein.

41. The method of any one of claims 27-40 wherein the polypeptide is a human  
15 protein.

42. The method of any one of claims 27-41 wherein the polypeptide is a naturally occurring protein.

43. An isolated antigenic peptide that is specific for the candidate polypeptide of any one of claims 27-42 that is produced according to the method of any one of claims 27-42.

20 44. An antigenic peptide that is at least about 90% identical to the isolated antigenic peptide of claim 43.

45. An isolated antigenic peptide that is an analog of the isolated antigenic peptide of claim 43.

46. An isolated antigenic peptide comprising a short antigenic amino acid  
25 sequence that is identical to at least 5 consecutive amino acids of the isolated antigenic peptide of claim 43.

47. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids of the isolated antigenic peptide of claim  
30 43.

48. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 in a sample comprising:

a) an isolated antigenic peptide according to any one of claims 43-47 and derived from the candidate polypeptide, and

b) at least one of a reagent or a device for detecting the antibodies.

49. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 43, wherein the antibody was produced using the isolated antigenic peptide of claim 43.

50. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 44, wherein the antibody was produced using the isolated antigenic peptide of claim 44.

51. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 45, wherein the antibody was produced using the isolated antigenic peptide of claim 45.

52. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 46, wherein the antibody was produced using the isolated antigenic peptide of claim 46.

53. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 47, wherein the antibody was produced using the isolated antigenic peptide of claim 47.

54. The isolated antibody of any one of claims 49-53 wherein the antibody has high specificity and high affinity for the candidate polypeptide.

55. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 comprising:

a) an isolated antibody according to any one of claims 49-53, and

b) at least one of a reagent or a device for detecting the antibody.

56. An assay for the detection of a candidate polypeptide in a sample, comprising:

a) providing an isolated antigenic peptide according to any one of claims 43-47,

b) contacting the isolated antigenic peptide with the sample under conditions suitable and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific for the candidate polypeptide present in the sample, to provide an antibody-bound antigenic peptide, and

c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the sample contains the candidate polypeptide.

57. The assay of claim 56 further comprising the step of binding the isolated antigenic peptide or the antibody to a solid substrate.

58. The assay of claim 56 or 57 wherein the sample is an unpurified sample.

59. The assay of any one of claims 56-58 further comprising, prior to the  
5 contacting, obtaining the sample from a human being.

60. The assay of any one of claims 56-59 wherein the assay is selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an  
10 immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

61. An isolated nucleic acid molecule encoding an antigenic peptide according to any one of claims 43-47.

15 62. The isolated nucleic acid molecule according to claim 61 wherein the molecule encodes a naturally occurring human antigenic peptide.

63. An isolated nucleic acid molecule encoding an antigenic peptide that is at least about 90% identical to any one of the antigenic peptides set forth in claims 43-47.

64. The isolated nucleic acid molecule according to claim 63 wherein the  
20 antigenic peptide is at least about 95% identical to the antigenic peptide.

65. The isolated nucleic acid molecule according to claim 63 or 64 wherein the molecule encodes a naturally occurring human antigenic peptide.

66. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of claims 43-47 to genomic  
25 DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	SpeciesName
526	160397	Latrophilin-2	NP_036434.1	<p>MVSSGCRMRS LWFIIVISFL PNTEGFSRAA LPFGLVRREL SCEGYSIDLR CPGSDVIMIE  SANYGRITDDK ICDADPFQME NTDCYLPDAF KIMTQRNNR TQCIIVTGS  VFPDPCPGTY KYLEVQYECV PYFVCPGIL KAIVDSPCIY EAEQKAGAWC  KDPLQAADKI YFMPWTPYRT DTLEIYASLE DFQNSRQITTT YKLPNRVDGT  GFVYDGAVF ENKERTRNIV KFDLRTRIKS GEAINYANY HDTSPYRWGG  KTDIDLA VDE NGLWVIYATE QNNGMIVISQ LNPYTLRFEA TWETVYDKRA  ASNAFMICGV LYVVRSVYQD NESETGKNSI DYIYNTRLNR GEYVDVFPFN  QYQYIAADV NPNRNQLYVW NNNFILRYSL EFGPPDPAQV PTTAVTITSS  AELFKTIIST TSITSQKQGM STTVAGSQEG SKGTPKPPAV STTKIPPITN IFPLPERFCE  ALDSKGIKWP QTORGMMVER PCPKGTRGTA SYLCMISTGT WNPKGPDLSN  CTSHWVNQLA QKIRSGENAA SLANELAKHT KGPVAGDVS SSVRLMEQLV  DILDAQLQEL KPSEKDSAGR SYNKAIVDTV DNLLRPEALE SWKHMNSSEQ  AHTATMLLDT LEEGAFVLAD NLEPTRVSM PTENIVLEVA VLSTEGQIQD  FKFPLGIKGA GSSIQLSANT VKQNSRNLGA KLVFIIYRSL GQFLSTENAT IKLGADFIGR  NSTIAVNSHV ISVSINKESS RVYLTDPVLF TLPHIDPDNY FNANCSFWNY  SERTMMGYWS TQGCKLVDIN KTRITCACSH LTNFMAILMAH REIAYKDGVBH  ELLLTVTWV GIVISLVCLA ICIFTCCFR GLQSDRNTH KNLCINLFIA EFILIGIDK  TKYAIAPIF AGLLHFFFLA AFAWMCLEGV QLYLMLVEVF ESEYSRKYY  YVAGYLPAT VVGVSAAIDY KSYGTEKACW LHVDNVEIWS FIGPVTFIL LNIFLVITL  CKMVKHSNTL KPDSSRLNI KSWVLGAFAL LCLLGLTWSF GLLFINEETI  VMAYLFTIFN AFQGVFIIF HCALQKKVRK EYGKCFRHSY CCGGLPTESP  HSSVKASTTR TSARYSSGTQ SRIRRMWNDT VRKQSESSI SGDINSTSL  NOGHSNNAR DTSAMDITPL NGNFNNYSYL HKGDYNDVSQ VVDCGLSLND  TAFEKMISE LVHNNLRGSS KTHNLELTLP VKPVIGSSS EDDAIVADAS  SLMHSNPLGL ELHHKELEAP LIPQRTSHLL YQPQKKVKSE GTDSYVSQLT  AEAEDHLQSP NRDSLTYTSMPL NRDSPYSPES SPDMEEDLSP SRRSENEITY  YKSNPNLQAG HQLQMCYQIS RGNSDGYIIP INKEGCIPEG DVREGQMQLV TSL</p>	P	Homo sapiens
527	160411	G Protein-Coupled Receptor GPR48	NM_018490	<p>ccgcggctgg gagacagcga gccagagct gggggtgtt gcgagagcca cggcgggggc tggggcgagt ggccggcaltg  gctgaaggct gcgctcigca acctgaaga gccgctgcat tgagaggcca ggacagagga gaccgggicg atggcagagc  gcggccccc gcgctgcgc ggccggccc ggctgcctgc ccgctgcgc cggactgctg aaggggcga cgtccatgga  gcagcggaa ggccgaaact ccggagccc ccgctccctgc ccgctgcgc ggccgggggc acatggagg gcagcggagc  accgcggagg aagagacccc cgcctcagcc ccagagcccgc ctgccgggg gcggcggggg gcagcggagc  gagcagcggc ccggcgaggagg aggcggccgc agcaatggccg ggcccgctag ggctgctcgc ctctcgcgc  ctggggctgc tgcctcggc cggggccagc ggccggcgc cgcctcgc cgcggccgc tgcagcgcgc acggcgaccg  tcgggtggac tgcctcggga agggggctgac ggccggccc gagggcgca cgccttcac ccaagcgctg gatacagta  tgaaacaat tactagttg ccagaagatg cattaaaga ctttcctt ctagaagagc tacaatggc gggaacgac cttcttta  tcacccaa ggctgtct gggtgaaag aactcaagt tcaacgctc cagataatc agtgaaac agtaaccagt  gaagccatic gagggctgag tcttggcgt tagatgcaa ccaatlaac tcatccccc agagcagttt tgaaggactt</p>	A	Homo sapiens



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 ttattagac gaaaggggaa gtaattaga cagaaagtag ttatgtat ttcttagga gttgttat ctggaacctg tctattaaa  
 tggaaattc cataactt cccactata ttittataa aagagccat tcaatagct agaggttga ctctgtttaa acaagataat

528	160411	G Protein- Coupled Receptor GPR48	NP_060960.1	atgttattaa taaaaaataga agaagaaaga ataaagctta gtctctgtc tttaaaatt aaaaatttta ctgattoc atctatggc tttagacct ttactgggtg gacttaaa gtaaatg tcaatagt tttagaaca gtgtgtaaa tcaatgcaa accactgoc atattagta ttctgaat actaaaaa tccagctaga ttgagttta ataataaac tgcataact gtgcataaa tgaatttta tcttatgaa attatttta gaacacaagt tgggaaatgt ggcctgtt catctgtt aattaaagct accctctaaa ctatagtgc tgccagtgc agactgttaa atgtgtgtt atatacttt tgcattgaa atagctcttg ttgtacatg tcaagtgaat aaaaacagaa tcttgata tcaaatcat gtagttgta taaaatggg gaaggattt ttacagtg gtgttaatt tgaaggcca actatttaca agtttataa atgtcata tglataat cacaatgat aaatataaa tcaatataa gtaagaaact ctaattataa aggttttc caaaattcag gttattgaaa attttcatt ttattcatt aaaaactaga ataacagata tataaaagt ttaacttng tgcataagg taaaaaac aatattgac tcaagtgtt gaattataa agttictaga aagcaaaaa a	P	Homo sapiens
529	160435	LS160435 Receptor	AX147830	MPGPLGLLCF LALGLLSAG PSGAAPPLCA APCSCDGD RR VDCSGKGLTA VPEGLSAFTQ ALDISMNNIT QLPEDAFKNF PFLEELQLAG NDLSFIHPKA LSGLKELKVL TLQNNQLKTV PSEAIRGLSA LQSLRLDANH ITSVPEDSFE GLVQLRHLWL DDNSLTEVPV HPLSNLPTLQ ALTLANKIS SIPDFAFTNL SSLVVLHLHN NKIRLSQHC FDGLDNLETL DLSYNNLGEF PQAIAKARPSL KELGFHSNSI SVIPDGA FDG NPLLRTHLY DNPLSFVGN ASHNLSDLHS LVIRGASMVQ QFPNL TGT VH LESLTLTGK ISSIPNNLCQ EQKMLRTLDL SYNNIRDLPS FNGCHALEEI SLQRNQIYQI KEGTFQGLIS LRILDLRNL IEHHSRAFA TLGPITNLDV SFNELTSFT EGPNGLNQLK LVGNFKLKEA LAAKDFVNLR SLSVYAYQC CAFWGCDSYA NLNTEDNSLQ DHSVAQEKGT ADAANVTSTL ENEHSQIII HCTPSTGAFK PCEYLLGSWM IRLTVWFEL VALFFNLLVI LTTFASCTSL PSSKLFGLI SVSNLFMGYI TGILTFLDV SWGRFAEFGI WWETGSGCKV AGFLAVFSE SAIFLLMLAT VERSLSAKDI MKNGSKNHLK QFRVAALSAF LGATVAGCFP LFRGEYSAS PLCLPFTGE TPSLFTVTL VLLNSLAFL MAVIYTKLYC NLEKEDLSEN SQSSMIKHVA WLIFTNClFF CPVAFFSFAP LIT AISISPE IMKSVTLIFF PLPACLNPLV YVFFNPKFKE DWKLLKRRVT KKSGSVSVSI SSQGGCLEQD FYDCCGMYSH LQGNLTVDCD CESFLLT KP V SKHLIKSHS CPALAVASCQ RPEGYWSDCG TQSAHSDYAD EEDSFVSDSS DQVQACGRAC FYQSRGFPLV RYAYNLPRVK D aactggaagg gcagccgctt gcgcccacg aacacctct caagcactt gagigaccac ggcttgcaag ctgggtggctg gcccccgag tccggggctc tgaagcacgg ccgtgactt aagcttgca tctgttacc tggagacct ctgagctctc acctgtact tctggcctg cttctgcaca gagccgggc gaggaacct ccaggatgca ggtccggaac agcaaccggcc cggacaacgc gacgtctgcag atgtgcgga accggcgat cgggtggcc cggcccgctg tgaactgct gggtggcggc gtcagcatoc cgggcaacct cttctctctg tgggtgctgt gcggcgccat ggggccaga tcccgtcg tcatcttcat gatcaacctg agcgtcacgg acctgatgtt ggccagcgtg ttgcttcc aatctacta ccattgcaac cggcaccact gggtattcgg gggtctgctt tgaacgtgg tgaacctggc ctttiacga aacatgtatt ccagcatctt caccatgacc tgalacgcg tggagccgtt octgggggct cgtaccocg tcagtccaa ggcttgccgc cggcgtgtt acgggtggc cggctgtgca gggaacctgg tctgtctct gaccgcccgt tcccggcgat cggcgaccga tctacacac cgggtgcag ccctgggcat calcaactgc ttgacgtcc tcaagtggac gatgtccoc agcgtggcca tgggtggcgt gtctcttc accatctca tctgtctgt cttatccg ttctgtatca ccgtggctg ttacagggc accatctca agctgtgctg cacggaggag gcgcacggc ggagagcagc gagggcgccg gggtggcctgg ccgcggtgggt ctgtgtggc ttgtacct	A	Homo sapiens

530	160435	LS160435 Receptor	LR80	<p>gcttcgcccc caacaattc gtgtctctcgt cgcacatcgt gaggccgcctg ttctacggcca agagctacta ccacgtgtac aagctcacgc tgtgtctcag ctgcctcaac aactgtctgg acccggttgt ttattacttt gctgcocggg aattccagct ggcctcgcgg gaaatattgg gctgcocggc ggtgtccaga gacacccctgg acacgcgcg cgaagccacca ggcocggcct ccagagggcag gagggtgtgt cgtgcgtcc gaggccgggt cgcacocctga agggatggag gggagccacca gcttgagaga tcagggggcg catggagggc ccacgggtgc tctgagctcc gggggcgag ctggagagc cggggcgca gcttgagaga gcttgagaga gcttgagaga gcttcaggc ttattctc aggaggttcag ggaagacgc tgcgtgtct ccaggcctg caggggcg gttgggagag gttccaggc ttattctc ccaggcctg cagagccac ggttgagag ggttcagag ctctacag ggttgagaga caagcaagc ccagcagcgc acaggggtct tgtatctg cagaggggtc ctgtccct ctgtgtcag ggaagcgttg tgcaccacg ccgggctaat ttgtattt ttttttag agctggggcg tcaccccg gctctttag cactctcac accgtccat acccgaggat ggtattcaa ccagccccc cgcctacccg actcgggttc tggatatct ctgtggcg cagcggagcc ccattccag ctctctcc tgcagcac gtccttag acactgcc ataccagg atgatatc aaccgccc accgctacc cgcctgggt tctggatct ctgtgtggc gaactgcag cccattcc agctctct cctgtgaca tgcctctta gttgtgtc tggctctc cattctc cagggtgt ggtctcgta gccgggtga cgcgaaat tctgttatt tcactagg gcactgtgt tgcgtgtgt ggaaattc ttacagga gcgcgtggg ctctgcaag tcactact tccgtgcca ctctccca cacacacc ccccgtgc cgaattc</p> <p>MQVPNSTGPD NATLQMLRNP ALAVALPVVY SLVAAVSIPG NLFSLWVLCR RMGPRSPSVI FMINLSVTDL MLASVLPFQI YYHCNRHHWV FGVLNCNVVT VAFYANMYSS ILTMTCSISVE RFLGVLVPLS SKRWRRRRYA VAACAGTWLL LLTALSPLAR TDLTYPVHAL GIITCFDVLK WTMPLPSVMW AVFLFTIFIL LFLIPFVTV ACYTATILKL LRTEEAHGRE QRRRAVGLAA VLLAFVTCF APNPFVLLAH IVSRIFYGKS YYHYVKLTLC LSLNNCLDP FVYFASREF QLRLREYLGC RRVPRDLDLT RRESLFSART TSVRSEAGAH PEGMEGATRP GLQRQESVF</p>	P	Homo sapiens
531	160889	Platelet Activating Receptor Homolog (H963)	NM_013308	<p>gaatcggcc aaagaggct algctctc gaagctgc agcaaggct gctaggct acagaagata gccacggtg ttggagggt ttgaaatg gattcgaga tcagactgac tgaactggaa tctgtgctt atacttacc agctaccaa ccttggagc ttagaatt ttcttga ataggcgc atcttact tcccaaga tgacaacag ttctcttc tgcacgtt ataaagatc ggagccatt acgtatttt ttcttgt ttcttgt ggaattatg gaagtgtt tgaacctgg gctttatc agaaatc gaatcacag tgtgtgaga tctactaat taattgctt acagccgatt tctgtctac tctggcata ccagtgaaaa ttgtgtga cttgggtgt gcaacttga agctgaagat attccagc caagtacag cctgctcat ctatcata atgtattat caattact cttagcatt gtcagcatt accgtgtct tcaactgaca cacagctga agatcacc aatacaaga cccggattg ccaaaatgat atcaaccgt ggtgtgctaa tggctctt talaatggg ccaaatatga tgaatccat caaagacatc aaggaaaa caaatgtgg tgtatggag tttaaaagg aatttgaag aatttgcgt tgcgtgaca attcataig ttagcataa ttittaat tctagccat catitaaata tcaatgcc tttgaatcg acagcttac agaaacaaag ataatgaaa ttaccataat gtagaaagg ctctcataa calacttta gtgaccacgg gctacatcat algcttgt ccttaacca tgtccgaat cccgtatacc ctacgccaga cagaagctc aactgattgc tcaacagga ttactctt caaagccaaa gaggctac tgcctcgg tgtctgaa ctgtgtcttg atctatctt gactatcac ctctcaaaag catcgcctc aaggctcact gaggcttg cctcacctaa agagaccaag gctcagaag aaaaattaa algtaaaat aatgcataaa agacaggat ttgtgcta ccaattcgt ccttactgga ccataaagt aattatgct tgaagata aaaaaaaa aaagcgcc gc</p> <p>MTNSSFFCPV YKDLEPFTYF FYLVFLVGII GSCFATWAFI QKNTNHRCVS IYLINLLTAD FLTLALPVK IVVDLGVAPW KLKIFHCQVT ACLIYNMYL SIIFLAFVSI DRCLQLTHSC KIYRIQEPGF AKMISTVVWL MVLIMVPNM MPIKDIKEK</p>	A	Homo sapiens
532	160889	Platelet Activating Receptor	NP_037440.1		P	Homo sapiens

Homolog (H963)

533	161024	Protein A	NM_019858	<p>SNVGCMEFK EFGRNWHLLT NFICVAIFLN FSAILISNC LVIRQLYRNK  DNENYPNVKK ALINILLVTT GYICFVPH IVRIPTYLSQ TEVITDCSTR ISLFKAKEAT  LLLA VSNLCF DPILYYHLSK AFRSKVTET ASPKETKAQK EKLRCENNA  ggggggggag ggcggggcgag cggggcgagg caggcagcgg gagccgaga gagcgcgcg gggagtcggg tctccatggc  agtgtctggc gcagccggag agagctctgc cagggggctg agccccaccc ccaatccct ggggcatcca gaagattcct  gactgtcaa gaaccagagg caaagagac ctggagtc cagcatgggg accaagacc ccagccagc ctcatatgg  ggaaagtagc cagcttgctt gcccataa ttgcagggat gcttaaggaa gggcccgccc agtatgaaag ctgaggatgg  cctctgtctg cctcagct cctccctgc ccctacatc tggctcagc tgggtccatc atgcaatgct gagcacctggg  gtgagcttgg gggcagcctg cctgtctaca gggcgaggat tggggggatc atgggagttgt ttgtgagttg ggtcctctggg  tgaagcttag ccccccaccc cacagctc aagggggggg ggggctggag ataggatggc tggggggcggg gcccggggcag  agggggccct cctgcctcc aacgattgt cctggctggc ctggggctc ctggcgctc tggccaatgc ctggatcatc  ctcagcatct cggccaagca gcaagagcac aagccactgg agctgtgct ctgtctctta gggggcacac acatactcat  ggcagctgtg cccctacca ccttgccgt ggtgcagctg cgtcgtcagg cttctccga ctatgactgg aacgagagta  tctgcaagggt ctctgtct accctacta ccttgccgt gggccactgc ttacgggtcg cctcctctc ctacatcgc  atgtggatgg tgccttggcc cgtcaactac cgtctcagca acgccaagaa gcaaggcactg calgcccgtca tgggcatctg  gatgtcagc ttacctct ccacactgccc ctccattggc tggcacaaca acggcgaggcg ctactatgcc cggcgcttgc  agttcatagt ctccaagatc gggctgggt ttggcggttt ctacggctc ttgtactg gggggaattgt catgggtctg gttgtgtgg  ccatcacctt ctaccagca ctgtggggccc gggccgggag ggtcgggag gagccggagag tggggggggg tgggggggacc  aaagcgggtg gggcagggcg ctgggtacc cggccagctt ttgaggtacc agccattgtg gttggagggag cccgagggaa  ggcggtgtcc tgcgtggatg gctcggagtc tggcaagaca tccctgagc tcaacaact ggtcagcgccc atcgtcttc  tctatgactc actcacaggg gttcccatct tgggtgtgag ctctctcc ctcaagctgg actcggcgccc cccctgggag  gtctgtggctg tctgtgtgtg ctccatggca cagacgctgc tgcctccct ctacatctg tccctggcg gctaccgccc  cgacgtgcgc acagttgtgg agcaatgctt gggccatcag tctggagagg atgggagatga cgtatggggg tgtgacgact  atgcagaggg ccgagtttgc aaagtctgt ttgatctaa cggagccaca ggaaccaggga gcccgggacc cggccaggtg  aaagctgc ctggaaaggca catgtcttc cctctctg agagagttca ctactacag gtccccctat cccggcgct  gtccatgat gagacaaaca tctctctac cctcggggaa cagggctct tctgcacaa gttgtcatcc tctgatga  tccgggtct cccagccag agccggggccc tgggggggtcc tcttgagttac ctgggacaaa gacacaggtt ggaaggacgg  gaggaagagg aagagagctga aggttgggggg ctggccagcc ttgcacaat ctggagagt ggggttcttgg gttcaggtgg  gggaacccca cgggggtctg gctcttcg ggaaggatc accacttca tcatgagac acctctgct tctccgactg  cctcacagg gcatctct cgtcggccc gggcactggg cctcaccc cggccgactct ccttgggtc ccttgagagc  agagccgtg gacttctt gggactaagc gcaaggagac gctgtccct gacgggggggt gaagaaagt gcaaggcttg  gggaaggatc tggggccag gcaaccocat ctctccag ctgacctgt gaggccagc aggcctgtc aactcagg  agaaagcctg agtgaagaa acctattct gggcgaggt agggcagctg cctccagct ctggggagac gggcgctaga  ttgggggtc agaaaggcct gctctctcc atccaaatga ccagatgcc tactcagctt ccatccccc tagcaatag tattaaagc  tgaaggttg ccatgg</p>	A	Homo sapiens
534	161024	Protein A	NP_062832.1	<p>MARGGAGAE ASLRSNALSW LACGLLALLA NAWILSISA KQKHKPLEL  LLCFLAGTHI LMAAVPLTTF AVVQLRRQAS SDYDWNESIC KVFVSTYYTL  ALATCFTVAS LSYHRMWMVR WPVNYRLSNA KQALHA VMG IWMVSFILST  LPSIGWHNNG ERYYARGCQF IVSKI GLGFG VCFSLLLGG IVMGLVCVAI  TFYQTLWARP RRARQARRVG GGGGTKAGGP GALGTRPAFE VPAIVVEDAR</p>	P	Homo sapiens

535	161214	Galanin Receptor GalR3	NM_003614	A	Homo sapiens	<p>GKRRSLDGS ESAKTSLOVT NLVSAIVELY DSLTGVPLV VSFFSLKSDS  APPWMVLAVL WCSMAQTL LL PSFIWSCERY RADVRTVWEQ CVAIMSEEDG  DDGGGDDYA EGRVCKVREF ANGATPGSR DPAQVKLLPG RHMLFPFLER  VHYLQVPLSR RLSHDETNI STPREPGSFL HKWSSSDDIR VLPAQSRALG  GPPEYLGQRH RLEDEEDEEE AEGGGLASLR QFLESGLVGS GGGPPRPGPF  FREEITTFID ETPLPSPTAS PGHSPPRRPRP LGLSPRRLSL GSPESRAVGL PLGLSAGRRC  SLTGEESAR AWGGSWGPNG PIFPQLTL</p> <p>tocacgtgc cgtctgatg gggagatggc tgaigccacg aacatticac tggacagccc agggagatg gggccgtgg  cagtgccgt ggtttggc ctaatticc tgcaggcac agtgggcaat gggcgtggc tggcagtgct cctgcagct  ggcccgagtg cctggcagga gccggcagc accacggacc tggatcct caaactggcg gggcgtggc tctgttcac  cctgtgtgc gggccctc agggccacat ciacacgtg galgccgtgc tcttggggc cctgtgtgc aaggccgtgc  acctgtcat ctaactacc atgiacgcca gcagcttac gctggcgtg gctccggg acaggtacct gggcgtggc  caaccgtgc gctggcgcg cctggcgacg ccgctgaacg ccggcgccg agtggggcgtg gttggcgtgc tggcgcgct  cttcggcg cctactica gctactacgg caccgtgcg taaggcgcg tggagctgtg cgtggccgoc tggggagggc  cgcccgccg cgccctggac gttggccact tgcgtgcgg ctaactgtg cccgtggcgtg tggtagcct gggcctacgg  cgacgtgc gctcctgtg gggcccggtg ggtcccggtg gggcgggcg gggcagggcg cggcgagggc gggcgggcg  cgccggcgcg gccatgtgg cgtggcgcg gctciacgg cctgtggg gtcggaccca cggcgtcalt cgtgtctt  ggtagggcg cttgccttc agccggcca cctacgctg ccggcgtgg tcaacagc tggcctacgc caactcgtc  ctaacccgc tgcctacgc gctgcctgc cggcacttc gggcgcgctt ccggcgcgctg tggcggtggc gggcgcgac  ccggcaccgt gggcgcgcg cctgtgtgc cgtgcggcc ggtctcctcg gggcggcgcg cgtggcgcg gggcgcgcg  ctagcgggg gctgtgtgt ggtggcgcg agggcgcg gggcgcg gggcgcg gggcgcg gggcgcg gggcgcg  ggcgcggaat aaacgtgc gctggcgtc ggtgtgt</p> <p>MADAQNISLD SPGSVGA VAV PVVFAIFLL GTVGNGLVLA VLLQPGPSAW  QEPGSTTDLF ILNLAVADLC FILCCVPFQA TTYTLD AWWLF GALVCKAVHL  LIVLIMYASS FTAAVSVDR YLAVRHPLRS RALRTPRNR AAVGLVWLLA  ALFSAPYLSY YGTVRYGALE LCVPAWEDAR RRALDVATFA AGYLLPVAVV  SLAYGRTLRF LWAAVGPAGA AAARRRAT GRAGRAMLAV AALYALCWGP  HHALLCFWY GRFAFSPATY ARLASHCLA YANSCLNPLV YALASRHFA  RFRLWPCGR RRRHRARRAL RRVRPASSGP PGCPGDARPS GRLLAGGGQG  PEPREGPVHG GEARGPE</p> <p>atggcgctga ccccgagtc cccgagcagc ttccgtggcg tggcgcgccac cggcagctct gggcgggagc cggcgtggcg  ccccaagca acctcaaca gctcctggcg cagcccgacc gggccagct cctgggagga cctgggtggc acgggcaoca  ttgggactct gctgtcgcc atggcggtgg tggcggtgtt gggcagcg taacagctgg tggcactgg ccgctccctg  cgtgggtgg cctcagta cgtctacgtg gtaacctgg cgtggcgcg cgtgtgtac cgtgtgtac tcccttcat  cgtggcgacc taactacca agggagtgcca ctgggggac gttggcgcg ggtgtgtctt cggcctggac ttctgacca  tgcagccag catctacca ctgacgtga tgaagagga gctgtacgt gctgtgtctt gggcggtgtg caccgtgtgag  cgcccaagg gctacggcaa gctgtgtgg cgtgtgtgg cgtgtgtgg gctgtgtgg cgtgtgtgg cgtgtgtgg  caltgtgtg gttggcggg gttcccaagg cctgtgtgt cgtgtgtgt gggcggtgg ccccgcgcg caccggcg caccgtgtg  tgcctgtgc caccagcalt gggggggcg ggtgtgtcat cgtgtgtcat tggcggtgg tggcggtgg cttacggcg  tgcagcgcg cctcttcaa gggggggcg cggcggtgt ggtgtgtgt ggtgtgtgt ggtgtgtgt ggtgtgtgt</p>
536	161214	Galanin Receptor GalR3	NP_003605.1	P	Homo sapiens	<p>LIVLIMYASS FTAAVSVDR YLAVRHPLRS RALRTPRNR AAVGLVWLLA  ALFSAPYLSY YGTVRYGALE LCVPAWEDAR RRALDVATFA AGYLLPVAVV  SLAYGRTLRF LWAAVGPAGA AAARRRAT GRAGRAMLAV AALYALCWGP  HHALLCFWY GRFAFSPATY ARLASHCLA YANSCLNPLV YALASRHFA  RFRLWPCGR RRRHRARRAL RRVRPASSGP PGCPGDARPS GRLLAGGGQG  PEPREGPVHG GEARGPE</p> <p>atggcgctga ccccgagtc cccgagcagc ttccgtggcg tggcgcgccac cggcagctct gggcgggagc cggcgtggcg  ccccaagca acctcaaca gctcctggcg cagcccgacc gggccagct cctgggagga cctgggtggc acgggcaoca  ttgggactct gctgtcgcc atggcggtgg tggcggtgtt gggcagcg taacagctgg tggcactgg ccgctccctg  cgtgggtgg cctcagta cgtctacgtg gtaacctgg cgtggcgcg cgtgtgtac cgtgtgtac tcccttcat  cgtggcgacc taactacca agggagtgcca ctgggggac gttggcgcg ggtgtgtctt cggcctggac ttctgacca  tgcagccag catctacca ctgacgtga tgaagagga gctgtacgt gctgtgtctt gggcggtgtg caccgtgtgag  cgcccaagg gctacggcaa gctgtgtgg cgtgtgtgg cgtgtgtgg gctgtgtgg cgtgtgtgg cgtgtgtgg  caltgtgtg gttggcggg gttcccaagg cctgtgtgt cgtgtgtgt gggcggtgg ccccgcgcg caccgtgtg  tgcctgtgc caccagcalt gggggggcg ggtgtgtcat cgtgtgtcat tggcggtgg tggcggtgg cttacggcg  tgcagcgcg cctcttcaa gggggggcg cggcggtgt ggtgtgtgt ggtgtgtgt ggtgtgtgt ggtgtgtgt</p>
537	161221	Urotensin-II Receptor (GPR14)	NM_018949	A	Homo sapiens	<p>atggcgctga ccccgagtc cccgagcagc ttccgtggcg tggcgcgccac cggcagctct gggcgggagc cggcgtggcg  ccccaagca acctcaaca gctcctggcg cagcccgacc gggccagct cctgggagga cctgggtggc acgggcaoca  ttgggactct gctgtcgcc atggcggtgg tggcggtgtt gggcagcg taacagctgg tggcactgg ccgctccctg  cgtgggtgg cctcagta cgtctacgtg gtaacctgg cgtggcgcg cgtgtgtac cgtgtgtac tcccttcat  cgtggcgacc taactacca agggagtgcca ctgggggac gttggcgcg ggtgtgtctt cggcctggac ttctgacca  tgcagccag catctacca ctgacgtga tgaagagga gctgtacgt gctgtgtctt gggcggtgtg caccgtgtgag  cgcccaagg gctacggcaa gctgtgtgg cgtgtgtgg cgtgtgtgg gctgtgtgg cgtgtgtgg cgtgtgtgg  caltgtgtg gttggcggg gttcccaagg cctgtgtgt cgtgtgtgt gggcggtgg ccccgcgcg caccgtgtg  tgcctgtgc caccagcalt gggggggcg ggtgtgtcat cgtgtgtcat tggcggtgg tggcggtgg cttacggcg  tgcagcgcg cctcttcaa gggggggcg cggcggtgt ggtgtgtgt ggtgtgtgt ggtgtgtgt ggtgtgtgt</p>

538	161221	Urotensin-II Receptor (GPR14)	NP_061822.1	<p>ctgggctgc ttcttgccct tctggctgtg gcagctgtct gccagagacc accaggccccc gctggcgccg cggagcgccg</p> <p>gcctgtcaa ctactgacc acctgacct cctacggcaa cagctgcgccc aacctcttc tctacagct gctaccagg</p> <p>aataccgg accacttgg cggcgccgtg cggggccgg gcagcggggg aggcgggggg cccgttccct ccttgcagcc</p> <p>ccgcggccgc ttccagcgct gttcgccgct ctcctgtct tcttgcagcc cacagccacc tgacagccct gttgtggccc</p> <p>cagcgccccc ggccggacct ggcggcagg gtccagggc cccggcgga</p> <p>MALTPESPSS FPLAATGSS VPEPPGGPNA TLNSSWASPT EPSSLEDLVA</p> <p>TGTITLLSA MGVVGVVGN YTLVVTCSR RAVASMYVYV VNLADLLY</p> <p>LLSIPFIVAT YVTKWHFGD VGRVFLGLD FLTMHASIFT LTMSSERYA</p> <p>AVLRPLDTVQ RPKGYRKLK LGTWLLALL TLPVMLAMRL VRRGPKSLCL</p> <p>PAWGPRAHRA YLTLFATSI AGPGLLIGLL YARLARAYRR SQRASFRRAR</p> <p>RPGARALRLV LGIVLLFWAC FLPLFWQL AQYHQAPLAP RTARIVNYLT</p> <p>TCLTYGNSCA NPFLYTLTTR NYRDHLRGRV RGPGGGGRG PVPSLQPRAR</p> <p>FORCSGRSL SCSPTDLSL VLAPAAPARP APEGPRAPA</p>	P	Homo sapiens
539	161249	G Protein-Coupled Receptor GPR66	NM_006056	<p>atggcttga atggcagtg ggcaggggg cactttgacc ctgaggactt gaacctgact gaacaggcac tgagactcaa</p> <p>gtacctgggg cccagacaga cagagctgtt catgccatc ttgtccatc acctgtgat ctctgtgttg ggcgtgttg</p> <p>gcaatgggct gaactgtct gtcacttgc gccacaaggc catgcgcacg ctiaccaact actacctct cagccctggc</p> <p>gtgtggacc tgcctgtgt gctgtgtggc ctgccccttg agctatga gattgtggcac aactacctt tcttctggg</p> <p>cgttgtggc tgcatttcc gcacgtact gtttgagtg gttgtgttg cttcagtgct caacgtact gcoctgagcg</p> <p>tggaaagcta tttgtggcgtg gtgcacccac tccaggccag gtccatggg acggggccc atgtgcgcc agttgttg</p> <p>gocgtctgg gtttgccat gctctgtct ctgcccaca ccagcttgc cggcatcccg cagctgtcacg tgccttgcg</p> <p>gggcccagtg ccagactcag ctgtttgat gctgtgtccg ccacggggccc tctacaact gttgtgtgcag accaccg</p> <p>tgtcttctt ctgcctgcc atggccatca tgaagctgt ctactgtct attggcgctg gactgtggcg gtaggggctg</p> <p>ctgtcatgc agggaggccaa gggcaggggc tctgcagcag ccaggttcag atacatcgc aggttcacg agcagatcg</p> <p>gggcccggaga caagtgcacca agatgtctgt tgtctgtct gttgtgttg gcatgtctg gggcccgct caccggcagc</p> <p>gctcatgtg gagctcgtg tccagtgga cagatggcct gcaactggcg ttccagcag tgcacgtcat ctccggcact</p> <p>ttcttacc tgggtctggc ggccaaaccc gtgtctata gctcatc cagccgcttc ccagagacct tccaggaggc</p> <p>ctgtgcttc gggccctgt gcatgcct cagaccccg cagactccc acagctccag caggatgacc acaggcgacga</p> <p>ccctgtgtga tttgtgtctc ctggcgagct ggggtccacc cctgtgtgg aacgatggcc cagaggcgca gcaaggagacc</p> <p>gatactct ga</p> <p>MACNGSAARG HFDPEDLNLT DEALRLKYL G POQTELFMPI CATYLLIFV</p> <p>GAVGNGLTCL VILRHKAMRT PTNYTLFSLA VSDLLVLLVG LPLELYEMWH</p> <p>NYPELLVGG CYRFTLLFEM VCLASVLNVT ALSVERYVAV VHPLQARSMV</p> <p>TRAHVRRLVG AVWGLAMLCS LPNTSLHGR QLVHPCRPV PDSA VCMVLVR</p> <p>PRALYNMVVQ TTALLFFCLP MAIMSVLYLL IGLRRLRL LLMQEAQGRG</p> <p>SAAARSRYTC RLQQHDRRR QVTKMLFVLV VVFICWAPF HADRVMSVV</p> <p>SQWTDGLHLA FQHVHVISGI FFYLGSAANP VLYSLMSSRF RETFQALCL</p> <p>GACCHRLRPR HSSHLSRMT TGSTLCDVGS LGSWVHPLAG NDGPEAQOET DPS</p>	A	Homo sapiens
540	161249	G Protein-Coupled Receptor GPR66	NP_006047.1	<p>atggcttga atggcagtg ggcaggggg cactttgacc ctgaggactt gaacctgact gaacaggcac tgagactcaa</p> <p>gtacctgggg cccagacaga cagagctgtt catgccatc ttgtccatc acctgtgat ctctgtgttg ggcgtgttg</p> <p>gcaatgggct gaactgtct gtcacttgc gccacaaggc catgcgcacg ctiaccaact actacctct cagccctggc</p> <p>gtgtggacc tgcctgtgt gctgtgtggc ctgccccttg agctatga gattgtggcac aactacctt tcttctggg</p> <p>cgttgtggc tgcatttcc gcacgtact gtttgagtg gttgtgttg cttcagtgct caacgtact gcoctgagcg</p> <p>tggaaagcta tttgtggcgtg gtgcacccac tccaggccag gtccatggg acggggccc atgtgcgcc agttgttg</p> <p>gocgtctgg gtttgccat gctctgtct ctgcccaca ccagcttgc cggcatcccg cagctgtcacg tgccttgcg</p> <p>gggcccagtg ccagactcag ctgtttgat gctgtgtccg ccacggggccc tctacaact gttgtgtgcag accaccg</p> <p>tgtcttctt ctgcctgcc atggccatca tgaagctgt ctactgtct attggcgctg gactgtggcg gtaggggctg</p> <p>ctgtcatgc agggaggccaa gggcaggggc tctgcagcag ccaggttcag atacatcgc aggttcacg agcagatcg</p> <p>gggcccggaga caagtgcacca agatgtctgt tgtctgtct gttgtgttg gcatgtctg gggcccgct caccggcagc</p> <p>gctcatgtg gagctcgtg tccagtgga cagatggcct gcaactggcg ttccagcag tgcacgtcat ctccggcact</p> <p>ttcttacc tgggtctggc ggccaaaccc gtgtctata gctcatc cagccgcttc ccagagacct tccaggaggc</p> <p>ctgtgcttc gggccctgt gcatgcct cagaccccg cagactccc acagctccag caggatgacc acaggcgacga</p> <p>ccctgtgtga tttgtgtctc ctggcgagct ggggtccacc cctgtgtgg aacgatggcc cagaggcgca gcaaggagacc</p> <p>gatactct ga</p> <p>MACNGSAARG HFDPEDLNLT DEALRLKYL G POQTELFMPI CATYLLIFV</p> <p>GAVGNGLTCL VILRHKAMRT PTNYTLFSLA VSDLLVLLVG LPLELYEMWH</p> <p>NYPELLVGG CYRFTLLFEM VCLASVLNVT ALSVERYVAV VHPLQARSMV</p> <p>TRAHVRRLVG AVWGLAMLCS LPNTSLHGR QLVHPCRPV PDSA VCMVLVR</p> <p>PRALYNMVVQ TTALLFFCLP MAIMSVLYLL IGLRRLRL LLMQEAQGRG</p> <p>SAAARSRYTC RLQQHDRRR QVTKMLFVLV VVFICWAPF HADRVMSVV</p> <p>SQWTDGLHLA FQHVHVISGI FFYLGSAANP VLYSLMSSRF RETFQALCL</p> <p>GACCHRLRPR HSSHLSRMT TGSTLCDVGS LGSWVHPLAG NDGPEAQOET DPS</p>	P	Homo sapiens
541	161251	Purinergic Receptor P2Y10	NM_014499	<p>atggctaac ttgacaata cactgaataa ttcaagatgg gtagcaacag tacagcact gctgagatt acgtaatgt</p> <p>cactaatgt aaattcaat actocctcta tgcacaccc tatctctca tattcttcc ttgtctctg gctaacagtg cagccttgg</p> <p>gggtctgtgc cgttcaica gcaagaataa taagccatc atttcaiga tcaaccttc ttgtgtgtgc ctgtctcag tattatctt</p>	A	Homo sapiens

542	161251	Purinergic Receptor P2Y10	NP_055314.1	<p>accctccgg atttactt acatcagoca ccactggcct ttccagagag ccctttgctt gctctgctt tacctgaagt atctcaacat gtaigccagc atttgcttc tgaagtgcat cagtctcaa aggtgcttt ttctctcaa gcccttcagg gccagagact ggaagcgtag gtacgatg ggcacatg ctgcacatg gatctggtg gggactgctt gttgccaat tccatcttg agaagcacag acttaacaa caacaagtc tctttgtg atctggata caagcaaatg aatgcatg cgttgctg gatgattaca gtgctgagc ttgcaggatt tggatocca ggaatcalca tgcattggg tactgggaa actaatat ccttgagaca gccaccaatg gcttccaag ggatcagtga gaggcagaaa gcatcgagg tgggtgcat ggtgctgca gctcttca tctgttcac tccatcat ataatctta tttttac calggtaag gaaacatca ttgcatgtg tccgtgtc ggaatgcac tgaattcca cccttttg cttgtccttg caagctctg ctgctttg gatccaatc ttattact tatgcttca ggtttcgg accaatatc ccggccatggc agttcttga ccgctcccg cctcatgagc aagagagtg gttcaaat gattggctaa</p>	P	Homo sapiens
543	161293	G Protein- Coupled Receptor Ls161293 [Herpes virus]	NP_042597.1	<p>MANLDKYTET FKMGSTST AEYCNVTNV KQYSLYATT YLIFIPGLL ANSAALWVLC RFISKKNKA IFMINLSVAD LAHVLSLPLR IYYVISHHWP FORALCLLCF YLYLNMYAS ICFLTCISLQ RCFFLLKPER ARDWKRRYDV GISAAIWVV GTACLPFPL RSTDLNNKS CFADLYKQM NAVALVGMIT VAELAGFVP VIIAWCTWK TTISLRQPPM AFQISERQK ALRMVFMCAA VFICFTPYH INFYTMVK ETIISCPV RIALYFHPFC LCLASLCLL DPILYYFMAS EFRDQLSRHG SSVTRSLMS KESGSMIG MATTSATSTV NTSSLATMT TNFTSLTSV VTTIASLVPS TNSEDDYYDD LDDVDYEESA PCYKSDTTRL AAQVVPALYL LVFLGLLGN ILVVIIVRY MKIKNLTNML LLNLAISDLL FLTLFPWMH YIGMYHDWTF GISLCKLLRG VCYMSLYSQV FCILLTVDR YLA VVYAVTA LRFRVTTCGI VTCVCTWFLA GLLSLPEFF GHQDDNGRV QCDPYPEMS TNVWRAHVA KVIMLSLILP LLIMAVCYV IIRLLRRPS KKKYKAIRLI FVMVAYVF WTPYNIVLLL STFHA TLNL QCALSSNLDL ALLITKT VAY THCCINPVY AFVGEKFRH LYHFFHTYVA IYLCYIPFL SGDGEGKEGP TRI</p>	P	Equine herpesviru s 2
544	177147	Neuromedin K Receptor-Like (NK-4R)	NM_006679	<p>ggcagaaacc cgactgaccg cggccacggc ggctcccca cctgcccgt cctgcggggc gcgctgggct cggggcacic gggctggcc cccatggct cggccgggg gaaactgagc gctggggcgg gctgggggtg gccggccgg gccggcgtga ggaaactgac ctctcccg gcccgaccc cgtcccgic cccggcccg tctggagcg cctggccgg cccggccccc ggcacccgt tctgcagcc gccctggcc gttggcctct ggtcgtgctg ctacggcgcc gttggggccg tggcggtgct cggcaaccic gttgtgact ggaatgctt ggccacaag cgcattcgga cggtaacca cttctctc gtaaaccttg ccttcggcca cggcgccatg gccggcgca acgcgctggt caacttalc tagcgctgc acggagagtg gtacttcggc ggcaactact gccgcttcca gaacttct ccactacc cctgtgtgc cagcatctac tccatgacgg ccatcgoggt ggacagatac atggccatta ttgacccct gaagccagg cttgtgcca cggccacccg gatctgcat ggaagcatct ggatcggc atttactt gcaattctc agtgtctgta ttccaaaic aaagtacac caggccgtac tcttgctac gtgcagtggc cagaaggctc aaggcaacat ttacgtacc acatgact catcgctg gttactgt ttcttgct catcatggc atcaactaca ccatagtgg aatcacgct tggggagggg agatccagg agacaccttc gaacaatgacc aggaagcagct gaaggccaag cgggaagggt taaaatgat gatactgt gttgtgact ttggcattc cttgctgcc taccatct acttact caccggcalt tatcagcagc tgaacagggt gaaalacatc cagcaggct acctggccag cttctggctg gccatgagct cgaacatgta caaccacatc atctactgt gttgaaataa gagatttgt gctggcttca agaggcctt ccgctgggct ctttcatoc acgtctccag ctacgacgag ctggagctca aaggccacag gctocacca atgggacaga gcagcctata cacagtgaaca agaatggagt ccatgagcgt ggtattcgac tccaacgat gggaacagtc caggctcagc caccagaaga gagggagac cagagcgtga</p>	A	Homo sapiens

ggcctccaaig lctgctcccg caggaaactcc aagctccact ccaccacagc cagcttgig agctctctccc acatgctggg  
 ggaagaaaggc tctgattc tctctgggg caaggccact gacaggcacc cttctctg cactgctgct gctctcact cctctggaagc  
 tgaaggacag tttaagaca gctacgctta caataagaca gattgacat aaataaca aaatactac taagataiga gctctcccc  
 caaaaaaga acaaatggg ctttaagagt atgcttgaa aacttaat taataatg atacaaca aaataagat  
 ccaggaaata ttataaagt gctcagtttt gcttaataa aagctactg gacactgala tggtagtttt ttocaaaaat  
 ataaagttt aaatttaat actgcaagc aaggaagcc atgtttca ttacagagca tagaagga aaattaag atcaatttc  
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 atttaatga aaaggaaacc taactaac cactaggctt aictaaatg cttictta ttittictg agaaatgagt ttcaaggaa  
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 galctctat ttacagaat ttgttctaa gtaggtagat tgaagacat taataact ttctgagatg gaaggaaaga atccattg  
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 cagctccaaag gcagttgtt ttccctgta cccagcaaa agttccagac atgcaactta tcaacat atgtgtctcc tctcttca  
 tcaagaaagg aggtgggca tgggggaggg atcagaagc gctctgtaaa aatctgaga ggaagaaagt gtaagaaat  
 tgaagacaaa tatgctgat gaaattaa taatgttg aaatacagac aggaagtaga aagttagatc aactttga  
 aagtagtacc atagtggg tcaacctga ggttagagac aaattatccc tgcgtttcca cacaagacc tgaagctct  
 gcataggtaa cctgtctcc tcaagaaagg acgggaaga ggcattgt ttactaat agtatatt ttgagaacca tattgtgag  
 tttttatgc ctcaacttg aagcatgac ctttcttaa attagaala ctgtcaatc tgcgaaga atcaaacoc ttctggaaat  
 cttaagtgt tatataact tctgtaaat atgttaggt ttgaaagt gctaaata atattctta acattatt cattgctatg  
 ccttcttag tgcagaacc aaataact ttcaagatca gcaaaaagc aaatacca tgaacaagt tggctatg ttacctgat  
 ataatccc caatctct tggagccaa agtcagaat attagtgt tagcttaac agcttaaca calgaattg agttgaatt  
 ctttaatga caccaataa cacaacaag tagatggcac aataatg cagacata caaccagcca atgaatga  
 caatatcaag aagaaatia aaattatc taaacagta taagtggt tttccaggt ctagaata actaataa atctgtga  
 calgtgtga ctttttga taaacaagt tatcaatatt tagaactaa ttgttgaat gtttaacat gtaggggagc ttggcttca  
 aattcatat agtcagccac taacaagta tatctgaat acatctt gaccttaca tgcattagc aaattcagc talggcgtt  
 cttaagaaata aatagtagct taatctgt ttgtctgt ttgttgaat ttittta gtagattgt tggccttg ctacogagc  
 atcactct ctatagc agaaatctg aggtccaggt cactctt aaatagta gaaactga catcattac tcaatagca  
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 caagttgt aaattact gtagtagta aaattccat ctctgata tggccaag tttaataa atgtttat



545	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	ttaataatat taataatcat atgaaaaat MASPAGNL SA WPGWGWPPPA ALRNL TSSPA PTASPPAPS WTPSPRPGPA HPFLQPPWAV ALWSLAYGAV VAVAVLGNL V VIWIVLAHKR MRTVTNSFLV NLAFADAAMA ALNALVNFTY ALHGEWYFGA NYCRFQNFPP ITAVFASIYS MTAIAVDRYM AIIDPLKPRL SATATRIVIG SIWLAFLA FPQCLYSKIK VMPGRILCYV QWPEGRQHF TYHMIIVLV YCFPLLIMGI TYTIVGITLW GGEIPGDTCD KYQEQLKAKR KVVKMMIIV YFAICWLPY HIYFILTAIY QQLNRWKYIQ QVYLAFWLA MSSTMNPII VCCLNKRFR GFKRAFRCWP FIHVSSYDEL ELKATRLHPM RQSSLYTVTR MESMSVVFDS NDGDSARSSH QKRGTTTRDVG SNVCSRRNSK STSTTASFVS SSHMSVEEGS atggatgaaa caggaaatct gacagtatct tctgccatc gccatgacac taatgaagc ticcgaate aagitatic cactctgac tctatgatc cigtgttagg cttcttgcc aatggcttg tctctatg cctcataaaa acctatcaca agaagtcagc ctccaagta tactagatta attagcagc agcagatctia cttgtgtgt gcacatgoc tctccgtgtg gctctatgtg ttcacaaagg cacttggtc tttgtgtact tctgtgccc cctcagcacc tatgtctgt atgcaacct ctatgtagc atctcttta tgcacagccat gactttttc cgtgtcattg caatgtttt tocatgccc aacattaat tggatcaca gaaaaagcc aggttgtgt gtaggtat tggatttt gtgatttga ccagtctoc attictaag gccaaaccac aaaaagatga gaaaaataat accaagcti tgaagcccc acaagacaat caaactaaa atcatgttt ggtctgtcat tatgtgtcat tttgttgg cttatcatc cctttgtia ttaataitg cigtacaca atgacattt tgccttact aaaaaalca algaaaaaaa atcgtcaag tcatataaa gctataggaa tgcattggt cgtgaacct gctttttag tcaatgcat gccatcatc atcaacgta ccatcact tcaatttta cacaatgaaa ctataacccgt tgaatctgt cttagaatgc agaagtcgt ggtcataacc tigtctgtg cgtcatcaa tigtgtctt gacotctoc tatattct ttctgtgggt aactttaga aaggtctgc tacattcaga aagcatctt tgcacagct gactatgta cccagaaaaa aggcctttt gccagaaaaa ggagagaaa tatgtaagt atag MDETGNLTVS SATCHDTIDD FRNQVYSTLY SMISVVGFFG NGFVLVYLK TYHKSAFQV YMINLA VADL LCVCITPLRV VYVHKGIWL FGDFLCRLST YALVYNLYCS IFFMTAMSF RCIAIVFPVQ NINLVTQKKA RFVCVGIWIF VILTSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVLVLH YVSLFVGFI PFVHVCYT MIILTLKKK MKKNLSSHKK AIGMIMVVTA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCCF DPLL YFFSGG NFRKRLSTFR KHSLSSTVTV PRKKA SLPEK GEEICKV ccacgctgc gccggtgca cgtgtcac cggcagcgt caggctcgg cttctcgc cgtgcagcag ccgctgtgc ggccacatg agctcggatc cggcccccgc cccctgcca cggctgtctc tggccccggc cccggccccg cggacacatgc gctggcgccc cccaggggaa acccgaccgc gccaaaggcc cgcataagc aggtccccgg gccggggccc ctcggggccc cccagcttc ggccggcgcc cgtcccgcc tccgggagcc gcgtgagcct gcggggcccat ggagcgcgcg ccgcccagc ggccgctgaa cgttcgggg gcgtggcg gcgagcgcc ggccggcg gcggcgccgc gctctcgg agcctggacc gggtgtgt ccgctcat ggctgtctc atcgtggca cgtgtgtgg caacgctgt gtcagctgc cttctgtgc cgactcgc ctcgaccc agaaactt cttctgtc aactgtcca tctcgcact cctgtcggc gcttctgca tcccactga tgaacctac gtagctgacag gccgctggac cticggccc ggccctgca agctgtggct gtagtggac tacctgtt gcaactctc tgccttaac atcgtgctca tcaagctga ccgctcgtc tgggtaccc ggagcgctc ataccggggc cagcaggggtg acacggcg gcaggtgcgg aagatctgtc tgggtgggt gctggcctc cgtctgtacg gaccagcat cctgagctgg gtagtacctgt ccggggggcag ctccatccc ggaggccact gctatgcca gttcttctac	P	Homo sapiens
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550	177387	G Protein- Coupled Receptor ORF4	NM_020155	<p> agcggccgtt gctcgaacc gacgggtac agcggctt cccctcac cccagggaga calgaagac cggagcagg  gagctctc ctgggctt tgcacccc cactctgg ctagggtag gcccagggag gagaccccc caacccat  cgggtctg ctggagaaaa gagactggc ttccagccc ctgagtgagg ggcctggggc caggtgctt gttcccca  agggcaagg tctctgtt gaggaggggg gctgtag cacaactt ttctctga gggcccatc tctctg  caccctgcaa ttccacccc tccgtattia ttccctgtt cccggcaga gttcctctt gttgtctc gggattcagg cttccctcc  tgacatggag agtaacctt ctggctgtt gctgtgccc ggggtgggg ctggcgtcc acctgctg acctgggg  tgacagctc ctacacac ctgtagccc tctctctt ctccgtat ggcagctt ggttggtgt tctgtatgg caaagcgtc  tcagctatca gagggtgtt ctggccctt gttgtctg gggccgtt cgtaccac tctctctt ctactcca galactccc </p>	A	Homo sapiens

551	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	<p>ggcccaacgg cctggggccc ttgccctctt ggccttctta ctgtctgccc gcttgcctgc agttctcac cttagagctt atgaacctt actttgcca ggtggtgtc aaggccaagg tgaagcgtcg gccggagatg agccgaggct tgcctgctgt ccgaggggcc tttgggggg cctgcctgct ctttctgtg gtgaacgtcg tgtgtgctgt gctctccat cggcgccgac agccctgggc cctgtctt gtccgctcc tggtagcga ctccctgttc gtcattctgc cgtctctt tgcctgcctg cctgcctgc tgcgagcgg ggccctcca ctgacatca cctggaggcc aaggtaggcg tgcagcagtg atgcccaggt gctttggg tctctggca gggttctca ggtgttagag</p> <p>MESNLSGLVP AAGLVPALPP AVTLGLTAAY TTLALLFFS VYAQLWL VLL YGHKRLSYQT VFLALCLLWA ALRITLFSFY FRDTPRANRL GPLFWLLYC CPVCLQFFITL TLMNLYFAQV VFKAKVKRRP EMSRGLLA VR GAFVGASLLF LLVNVLC AVL SHRRQPWAL LLVRVLVSDS L FVICALSLA ACLCLVASGR PPLASTWRPR</p>	P	Homo sapiens
552	180956	Lysophosphatidic Acid Receptor Edg7	NM_012152	<p>cttcttaaa ttctttctta ggaatgtcac ttctctcca caatgaalga gttgtacat gacaaagaca tggactttt ttataatagg agcaacactg atactgtcga tgcattgaca ggaacaaagc ttgtgattgt ttgtgtgt gggacgttt tctgcctgtt tatttttt tctaatttc tggatcagc ggcagtgatc aaaaacagaa aatttcatt cccctctac taccgttgg ctaatttagc tgcctccgat ttctgcctg gaattgctta tgaattccg atgttaaca caggccacgt ttcaaaaact ttgactgtca accgctggtt tctccgicag gggtcttgc acagtgcctt gactgtccc ctaccaact tgcctgttat cgcctgggag aggcacatgt caatcatgag gatcggggc catagcaacc tgaacaaaaa gagggtgaca ctgtcattt tgcctgtc ggcctatgcc attttatgg ggcggtccc cacactggcg tggaaftgcc tctgcaacat ctctgcctgc tctccctgg ccccattha cagcagaggt tacctgttt tctggacagt gtccaacctc atggccttc tcatcattgt ttgtgtgtac ctgcggatct acgtgtacgt caagaggaaa accaagctt tctctcga tacaagtggg tccatcagcc ggcgttgagc accatgaag ctaatgaaga cgggtgatgac tgcctaggg gcgtttgtg tatctggac ccggggcctg gttgttcctg tccctgacgg cctgaactgc aggcagtggtg gcgtgcagca tgtgaanaag tggctcctg tgcctgcctg gctcaactc gtcgtgaacc ccatcatca ctctacaag gacgagaca tgtatggcac catgaagaag atgctgct gctctctca ggagaacca gagaggcgic cctctgcct ccccccaca gtctcagca ggagtgac aggcagccag tacatagg atagtattag ccaagggtgca gctcgaata aaagccttc ctactctg gatcctctc ggccacaca ggtgatgact gcttagg</p> <p>MNECHYDKHM DFFYNRSNTD TVDDWTGTL VVLCVGTFF CLFIFFSNL VIAAVKNRK FHFFFYLLA NLAAADFFAG IAYVFLMNT GPVSKTLTVN RWFLRQGLD SSLTASLTNL LVIAVERHMS IMRMRVHSNL TKKRVTLLIL LVWAIAFMG AVPTLGWNL CNISACSSLA PIYSRYLVF WTVSNLMAFL IMVVVYLRV VYVKRKTNL SPHTSGSISR RRTPMKLMKT VMTVLGAFV CWTPGLVLL LDGLNCRQCG VQHVKRWFL LALLNSVVNP IYSYKDEDM YGTMMKMICC FSQENPERRP SRPSTVLSR SDTGSQYIED SISQAVCNK STS</p>	A	Homo sapiens
553	180956	Lysophosphatidic Acid Receptor Edg7	NP_036284.1	<p>atgggcccc ggagggcgt gctggcgggt cttctggga tggactggc cgtggcgtgc ctatccaacg cactgggtgt gctttgtc gctacagcg ctgagctccg cactgagcg tcaaggctgc tctgtgtgaa tctgtctg ggcacctgc tgcctggcg gctggacatg cctctacgc tgcctgggt gatgcggggc cggacacccg cggcgcccg cgcaltgcaa gtcattggct tctgggacac cttctggcg tccaacggcg cgtcggcg cgtcggcg agcgagacc agtggctggc agtgggcttc cactggct agcgcgagc cctgcgacog cgtatggcg gctcgtgct gggctgtgct tggggagagt cgtggcct ctacggcgt gcatggct gctgtggct tggctacagc agcgcttcg cgtcctgtc gctcgtcgt ccggccgagc ctgagcgtcc ggcttcgca gcttccag ccacgtcca tgcctggggc ttctgtctgc cgtcgtggt gctctgctc acctgctcc aggtgcacog ggtggcacgc agacactgccc agcgcatgga caccgtcac atgaaggcgc</p>	P	Homo sapiens
554	189873	G Protein-Coupled Receptor GPR78	AF411107	<p>atgggcccc ggagggcgt gctggcgggt cttctggga tggactggc cgtggcgtgc ctatccaacg cactgggtgt gctttgtc gctacagcg ctgagctccg cactgagcg tcaaggctgc tctgtgtgaa tctgtctg ggcacctgc tgcctggcg gctggacatg cctctacgc tgcctgggt gatgcggggc cggacacccg cggcgcccg cgcaltgcaa gtcattggct tctgggacac cttctggcg tccaacggcg cgtcggcg cgtcggcg agcgagacc agtggctggc agtgggcttc cactggct agcgcgagc cctgcgacog cgtatggcg gctcgtgct gggctgtgct tggggagagt cgtggcct ctacggcgt gcatggct gctgtggct tggctacagc agcgcttcg cgtcctgtc gctcgtcgt ccggccgagc ctgagcgtcc ggcttcgca gcttccag ccacgtcca tgcctggggc ttctgtctgc cgtcgtggt gctctgctc acctgctcc aggtgcacog ggtggcacgc agacactgccc agcgcatgga caccgtcac atgaaggcgc</p>	A	Homo sapiens

555	189873	G Protein- Coupled Receptor GPR78	CAC34041.1	<p>tcgcgtgct cgcgcacctg caocccagtg tgcggcacgg ctgcctatc cagcagaagc ggcggccgcca cgcggccacc  aggaagattg gcatigtat tgcgacctc ctatctgt ttgcccggta tgcatacc aggcctggcgg agctcgtgcc  cttctcacc gtaaacgccc agtggggcat cctcagaag tgcctgaact acagcaaggc ggtggccgac cgttcacgt  actctcgt cgcggggcgg ttccgccaag tctggccgg catgtgac cggctgctga agagaacccc ggcgccagca  tcacccatg acagtctct ggaatggcc ggcattggc accagctgt gaagagaacc cgcggccag cgtocacca  caacgctct gggacacag agaalgatc ctgcctgag cagacacact ga  MGPGEALLAG LLVMVLAVAL LSNALVLLCC AYSaelRTRA SGVLLVNLSL  GHLLAALDM PFTLLGVMRG RTPSAPGACQ VIGFLDTFLA SNAALVAAL  SADQWLA VGF PLRYAGRLRP RYAGLLGCA WQSLAFSGA ALGCSWLGYG  SAFASCSRL PPEPERPFA AFTATLHAVG FVLPLAVLCL TSLQVHRVAR  RHCQRMDTVT MKALALLADL HPSVRQRCLI QQRRRHRAT RKIGIAIATF  LICFAPYVMT RLAEVPFVT VNAQWGLSK CLTYSKAVAD PFTYSLRLRP  FRQVLAGMVH RLLKRTPRPA STHDSSLDVA GMVHQLLKRT PRPASTHNGS  VDTENDSCLQ QTH</p>	P	Homo sapiens
556	189874	Neuromedin U Receptor 2	NM_020167	<p>atggaaaaac ttcaaatgc ttcttgatc taacagcaga aactagaaga tcaatccag aaacacctga acagcaccga  ggagatctg gcttctct cgggacctg gcgcagccac ttctctcc cctgtctgt ggtgtatgt ccaattttg tgggggggt  cattggcaat gctctgtgt gccgtgtat tctgcagcac caggctatga agacgcccac caactctac ctctcagcc  tggcggtctc tgacctctg gctctgtcc ttggaatgcc cctggaggc tatagaigt ggcgcaacta cctttctg  ttcggccgg tggcgtgcta ctcaagacg gcctctttg agacctgtg ctgcctcc atctcagca tcaccacct  cagcgtggag cgtactagg ccactctaca cccgtccgc gccaaacgc agagcacocg gcgcggggcc ctacggatcc  tcggcatcgt clggggcttc tccgtgtct tctccgtcc caacacagc atcagtcga tcaagtcca ctactcccc  aalgggtccc tgggtccagc ttgcgccacc tgcacgtga tcaagccat tggagctac aattcatca tccaggctac ctctctca  tttaacctc tcccatgac tgcatacgt gctctact acctatggc actcagacta aagaagaaga aatctctga ggcagatga  gggaatgcaa alattcaag acctgcaga aaacagica acagatgct gttgtctg tctgtatgt tgggtcccg  ttccacatg accgactct ctacgttt gggaggagt ggaatgaatc cctggctgt ggtcaacc tegtcatgt ggtgtcaggt  gtcttctt acctgagctc agctgtcaac ccaattatct gtctgcgcg ttccagcag caltccagaa tgtgtatct  tctttocaa aacagtggca ctccagcat gacccagct tgcacctgc ccaggggaac atctctctga cagaatgcca  ctttggag ctgaccggaag atataggctc ccaattocca tgcagtcat ccatgacaa ctctcaactc ccaacagccc  tcttagta acagatga agaacaact atcaagctt ccaattaac aaaaacctga</p>	A	Homo sapiens
557	189874	Neuromedin U Receptor 2	NP_064552.1	<p>MEKLQNASWI YQKLEDPFQ KHLNSTEYL AFLCGPRRSH FFLPVSVVYV  PIFVVGVIQN VLVCLVILQH QAMKTPNTY LFLSLAVSDLL VLLGMPLEV  YEMWRNPFL FGPVGCYFKT ALFETVCFAS ILSITVSVE RYVAILHPFR  AKLQSTRRA LRILGIVWGF SVLFSLPNTS IHGKIFHYFP NGSLVPGSAT  CTVIKPMWY NFIIQVTSFL FYLLPMTVIS VLYLMALRL KKDKSLEADE  GNANIQRPCR KSVNKMFLVL VLVFAICWAP FHIDRLFFSF VEEWSESLAA  VFNLVHVVS VFFYLSSAVN PIYNLLSRR FQAAFQNVIS SFHKQWHSQH  DPQLPPAQRN IFLTECHFVE LTEDIGPQFP CQSSMHNHSL PTALSSEQMS  RTNYQSFHFN KT</p>	P	Homo sapiens
558	189884	G Protein- Coupled Receptor	LG94108	<p>atgtggcag ctgccttg agactctaac tccagcaga tgaatgtgc ctgtctcac ctccacttg ccgaggga cctgcctct  gattocagg actggagaac calcatoccg gctctctgg tggctgtctg cctgggtggc ttctgggaa acctgtgtgt</p>	A	Homo sapiens

Ls189884

559	189884	G Protein-Coupled Receptor Ls189884	ENSMPT11140 67	MLAAAFADSN SSSMNVSAH LHFAGGYLPS DSQDWRTIP ALLVAVCLVG FVGNLCVIGI LLHNAWKGP SMHSLILNL SLADLSLLF SAPIRATAYS KSVWDLGWVF CKSSDWFHT CMAAKSLTIV VVAKVCFMYA SDPAKQVSIH NYTIWSVLVA IWTVASLLPL PEWFFSTIRH HEGVEMCLVD VPAVAEEFMS MFGKLYPLA FGLPLFFASF YFWRAYDQCK KRGTQTQNL NQIRSKQVTV MLLSIAUISA LLWLPEWVAW LWWHLKAAG PAPPOGFIAL SQVLMFSISS ANPLIFL VMS EEFREGLKGV WKWMITKPP TVSESQETPA GNSEGLPKDV PSPESPASIP EKEKPSPPSS GKGTKEAEI PILPDVEQFW HERDTVPSVQ DNDPIPWEHE DQETGEGV	P	Homo sapiens
560	189895	G Protein-Coupled Receptor GPR61	NM_031936	atggagtgct caccatoc ccagtcatac gggaactctt ccacttggg gagggctocct caaacocacg gtocctctac tggcagtgagg gtoccgagg tggggctacg agatgtgtct tgggaatctg tggccctctt cttaigtctc ctgaggact tgacttgctt ggctggcaat gcccgtgtga tggccgtgtat cggcaagacg cctggccctoc gaaaattgt ctctgtctc cactctggcc tgggtgacct gctggctggc ctgaacctca tggccctggc catgtctcc agccctggcc totttgacca cgccctctt gggtgggtgg cctggccct ctactgtt ctgagcgtgt gcttggcag cctggccatc ctctgggtgt cagccatcaa tgggtgagcg tactattacg tagtccaccc catggcgctac gaggtggcgca tgacgtggg gctgggtggcc tctgtgtctg tgggtgtgtg gggtgaaggcc ttggccalgg ctctgtggcc agtgttggga agggctctct gggtgggaagg agctccacgt gtcccccac actgttact ccagtggagc cacagtggct actggacgt ttgtgggt gtttggctg tctttacti tctgtggccc ctgtctctca tactttgtt ctactggc agtttccgag tggcccgctt ggctggccalg ccagacgggg cgtggccac gtggatggga acacccggc aacgtccga atcttcac agccgtoca agctgtcac cagctggggg gcccocaga ccacccaca ccggacgttt gggtggaggga aagcagcagt ggcttctg gctgtggggg gacagtctt gctctgtgg tggccactt tctttoca cctctatgt gcccgtggg ctgagcccat tcaacctgg caggtggga gttgtgtcac ctggatggg tactttgt tcaatcaa cctttctc tatggatgt tcaaccggga gatccggggg gtagctcagca agcagattgt ctgtcttc aagccagctc cagaggagga gctgaggctg cctagccggg agggctccat tggagagaac ttctggcagt tcttcaggg gactggctgt ctcttgggt cctgggtt cggacoccta cccagccoca agcaggagcc acctgtgtt gacttggaa tcaggccag atag	A	Homo sapiens
561	189895	G Protein-Coupled Receptor NP_114142.1	NP_114142.1	MESSPIQSS GNSSTLGRVP QTPGPSTASG VPEVGLRDVA SESVALFFML	P	Homo sapiens

	Coupled Receptor GPR61																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	</
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565	189901	G Protein-Coupled Receptor Ls189901 (HEOAD54)	CAC38933.1	<p>ggccacccgg gcagctgccc ccacgggaagc acgggctcagc acgtgggtggg gcctgcaccac ctccaggttag cgggttagtg cgtatggctgt gaggaagaca acgcctggccg tgcgggttgtt ggacagcagtg aagaggttga ctctgcaggc agcagcccca aagcgccagg tctatggtag gaggttagtag tccacgcgga gggggcaggtt gctgatcagg aggaagtcag cggccacacag gctgaccagg aacaccgtgt tggaggctoca gggccgcgtg tggatgcaga agatgaagag ggccaaactg ttcccacca ggccacagg aactcaccg gccaggattg gtgccaggaa ggccagacac agcgaggag aggtgggtg gcaggggccct ccaggagcc ccccccaggt ggtaaggc</p>	P	Homo sapiens
566	189904	Purinergic Receptor P2U2 (GPR91)	NM_033050	<p>MELHNLSPS PSLSSSVLPP SFSPSPSSAP SAFTTVGGSS GGPCHPTSSS LVSAFLAPIL ALEFVLGLVG NSLALFICFI HTRPWTSTNV FLVSLVAADF LLISNPLRV DYVLLHETWR FGAAACKVNL FMLSTNRTAS VFELTAIALN RYLKVVQPHH VLSRASVGAA ARVAGGLWVG ILLNGHLLL STFGSPSCLS YRVGTPKSAS LRWHQALYLL EFFLPLALIL FAIVSIGLTI RNRGLGQAG QRAMRVLAM VVAVYTICFL PSIFGMASM VAFWLSACRS LDLCTQLFHG SLAFTYLSV LDPVLYCFSS PNFLHQSRL LGLTRGRQP VSESSYQPS RQWRYREASR KAEAIKLV QGEVSLEKEG SSQG</p> <p>gggtatggt taactcagca gaatttgtt aacaactacg acalgcggg gacatggca tggaaigcaa ctgcaaaaa ciggctggca gcagaggctg cccggaaaaa gtaactcti tccatttiti atgggattga gtcgtgttg ggagtccttg gaaataccat tgtgtttac ggctacatct tctctcgaa gaactgggaac agcagtaata ttatctcti taacctctct gctctgact tagctttct gtgcacctc cccatgctga taaggagta tggcaatgga aactggatat atggagactg gctctgcata agcaacgat atggcttca tggcaacctc talaccagca ttctttct cactttatc agcatalcag gatacttgat aattaagiat cctttccgag aacacctct gcaaaagaaa gagtttgcta tttaatctc ctggcccti tgggttttag taaccttaga gttactacc atactcccc ttataactc tttataact gacaatggca ccacctgtaa tgaatttgca agttctggag acccaacta caactcatt tacagcagt gctaactc gtggggctc ctattctc ttittgtat gtgtttcti tattacaaga tgcctcti cctaaagcag aggaataggc aggtgtctac tgcctgccc ctgaaaagc cttcaacti ggatcaltg gcagtgga tttctctgt gcttttaca cctatcag tcatcgga tgtgaggatc gctcagcc tggggagtg gaagcagiat cagtgcactc aggtcgtcat caactcctt tacatttga caccgctti ggctttctg aacagtga tcaacctgt cttattti ctttgggag atcattcag ggacatgctg atgaatcac tgaagacaaa ctcaatcc ctatcccti ttagcagatg ggctatgaa ctctactti cactcagaa aagtgaggg gcttgtaaa cagattgtc tacaatgaa tctgtaagc agttacagt tgccttaact calagacac aatcagagag tgcacagat taaccttga tcaaaagaca agttgtacc agagtatgt aaaaagatgg gacgacaaga atgtacttgt ttctctct aagaatgaa aggaatgaa ctgctatg ttggggcatg taactccaa atactaggta gataaggct ttccaatca gtgcaaaaat ggaaatata taaaagcaaca agttgtctg attgatcac tggtagatg gtaaaaaa aaaaaaaa</p>	A	Homo sapiens
567	189904	Purinergic Receptor P2U2 (GPR91)	NP_149039.1	<p>MAWNAICKNW LAEEAALEKY YLSIFYGIEF VVGVLGNITV VYGYFSLKN WNSSNYLFN LSVSDYLAFLC TLPMLIRSYA NGNWYGDVL CISNRYVLHA NLYTSILFT FISDRYLI KYPFREHLLQ KKEFAILISL AIWVLVLEL LPILPLNPV ITDNGTTCND FASSGDPNYN LIYSMCLTL GFLPLFVVC FFYKIALFL KQRNRQVATA LPLEKPLNV IMAVVIFSVL FPHYHVMNV RIASRLGSWK QYQCTQVWIN SFYIVTRPLA FLNSVINPVF YELLGDHFRD MLMNQLRHNF KSLTSFSRWA HELLSFREK</p>	P	Homo sapiens
568	189920	G Protein-Coupled Receptor GPR63 (PSP24)	NM_030784	<p>tggagcagat ctccctgggc tcttcggcg ggcgcgcgc gctgccctc gcttgaggca aaaggactct tctggaagat ggaaactcatt gtccatttc cagaatgat ttcaagccc atcaatgga cctgalactg ctgtctgtg ttgaaagct tgaagaact ctgcatctct gcttgcatct tccatctac tgaacaccatg gtctctcgg cagtgtagac tgcgttccat accgggacat ccaacaac</p>	A	Homo sapiens

(beta)

atttgctg taagaaca cctacatga tttacatc cctccacat tccagatcc tgaactcagt tcaatgctta gataatgt  
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 ccatatagag ctgaagctt gattgagtt tctgggcaa cttctttg tgaatctt ctttagcog taggaaccc ogactgcag  
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 ggaatcagga ttgcttta ttgagcctg agttacatg aatgaggt gttctgtg ctgtaagg atgttatt gattatca  
 agactttt ttctgga gactgctg cttttact cactggag cc  
 MVFSAVLTAF HTGTSNTTFV VYENTYMNIT LPPFQHPDL SPLLRYSFET  
 MAPTGLSSLT VNSTAVPTT AAFKSLNPL QITLSAMIF ILFVSFLGNL  
 VVCLMVYQKA AMRSAINLL ASLAFADMLL AVLNMFPALV TILTRWIFG  
 KFFCRVSAMF FWLFVIEGVA ILLISIDRF LIIVQRQDKL NPYRAKVLIA VSWATSFCA  
 FLAVGNPDL QIPSRAPQCV FGYYTNPYQ AYVILISL FFPFLVILY SFMGILNLT  
 HNALRIHSYP EGICLSQASK LGLMSLQRPF QMSIDMGFKT RAFTTILLF  
 AVFVWAPF TTYSLVATFS KHYYQHNF EISTWLLWLC YLKSALNPLI  
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 taccatgoc galacttct aatcttgc atcattgct ggtgttgc tgccttagt ggtcagtg tttagcag cagaacaac  
 aatgaagct atggaaga agttatgg aaagaagaag gtatgaat ctgttgat caagatcag tcatattta ttgtacctt

569

189920

G Protein-  
 Coupled Receptor  
 GPR63 (PSP24  
 beta)

NP\_110411.1

P

Homo  
 sapiens

570

189945

G Protein-  
 Coupled Receptor  
 Dj287g14.2

AK027843

A

Homo  
 sapiens



571	189945	G Protein- Coupled Receptor DJ287g14.2	BAB55406	<p>gctggggtatt ttggagatcat gttttttctg aacattgcca tgttcattgt ggtaalggg cagatctgtg ggaggaaagg caagaagaagc  aacaggacc tgaagaaga agtgtaagg aactggcga gttgggttag ctgacctt ctgttgggca tgaatgggg  ttttgcatc ttggctggg gaaccthaaa tatcccttc atgtacctt tccacctt caatcatia caaggcttat ttatattcat  ctccactgt gctatgaagg agaalgitca gaacacagigg cggcgggcatc tctgtgtgg tagatttcgg ttacagagata  actcagattg gattgaagaca gctaccaata tcatcaagaa aagtctgtat aatciaggaa aatctttgtc ttcaagctcc attggttcca  actcaacctt tctatcatcc aatctaat ccagctctac cactattc aagaaggaata gccacacaga taatgtctcc tatgagcatt  cccttaacaa aagtggatca ctacagacgt gcttccatgg acaagctct gtcaaatcgt gccatgctgt atggagatca  aacatcaatc atccctgtcc atcagggtat tgaagggtc aggggttatt gcaatgcta ttacagaaac ttctataaaa atattatcat  gtcagacacc ttacgccaca gcacaaagt ttatgtct ttgaagaaag aatatcaatc ttacagaaatgt gaagatttgc  aagcagtgta aactgcaact agtgatgtaa atgtgtctat acctaggtaa ctgcatalat ataaggaaat tattttgtta agaaggcttt  tgtgaatc agaattttc tttaatat attcttcca tgggaagagt gicatcacia aaacttcagt acigagagata acaagacica  gtagccacag aagctatgat ttgtaaaata tataatgaa tcaagatgat cataatgcag ggagagacatt caaattagag  acaaggagga agcaalgctg aggaagacc tagatagagc tcatattact ccactaatc gttatalcig gatatacca ttittctgcat  cttcttctc aacaataac tgcctgtct ttggagact ttgaagcatt ctaaaagcac aataaaagc ctggtattc cccattgaga  gtttgtcc aaggaaatg aagtgaagaca tatgggttag tcaataat caaataat tatgaagagc tgggtctgca atagctagtc  taaaactac ttgtgtgca gtctctgt tatgtatat aagaagctga ggaagctctg caagatagat ggtgtattat ttatggatca  ggctgtgca lacaaacct gcalactat atgcagctta ctaacttc agactatc tgcitgctaa tgaatgtata  ggagaccaca ttgtaatgt tcttagatga tggagccat gcaattct agaaatcgt ctacgtgcat gctgtgtct ttacattg  ctctgggtta tctgggaagt atcaggttct gggaggcaac agcattaagt gataagaaa ggagacattc tggcaagcc  aatctgctta aaggcaagt ccagaacctg gaacttag gctttctct ctgacgaaa aacaggtagt ttgcagctg  agataggga gacttttag gctacacagc aacccaaggg acctctacc ttgtctgag cttaacacag gaagctatt  gctggctcc agcagatgat gataatga ggtatgggt ttattatc tgttccatt tgcacatcc tgcacacca tcttggggaga  caagacatt accagctg gcttacgg gggagggtg tattcagt</p> <p>MDFESGQVDP LASVLPPNL LENLSPEDSV LVRRQAQTFFF NKTLGFQDVG  PQRKTLVSYV MACSIGNITI QNLKDPVQIK IKHTRTQEVH HPICAFWDLN  KNKSFGGWNT SGCVAHRDSD ASETVCLCNH FTHFGVLM DL PRSASQLDAR  NTKVLTFISY ICGISAIFS AATLLTYVAF EKLRRDYP SK ILMNLSTALL FLNLLFLLDG  WITSFNVDGL CIAVAVLLHF FLAATFTWMG LEAHMYIAL VKVENTYIRR  YILKFCIIGW GLPALVSVV LASRNNEVY GKESYGKEKG DEFCWIQDPV  IFYVTCAGYF GVMFFLNIA M FIVVMVQICG RNGKRSNRTL REEVLRNLRS  VVSLTFLLGM TWGFAFFAWG PLNIPFMVYL FIFHFCAMKE  NVQKQWRRHL CCGRFR LADN SDWSKTATNI IKKSSDNLGK SLSSSSIGSN  STYLTSSKRS SSTTYFKRNS HTDNVSYEHS FNKSGSLRQC FHGQVLVKTG PC  caccattagg caaagatagt ttctatag agaatcagc ctgctaatha cactgtacc agggccagatg gagacaatac  agtatttga tacttatt atgcagtag alacactgic attctgtgc caggctcat agggaaataa ttgacctgt gggatctta  tggttatg aagaatacaa aacgagctgt gatatattag ataaacttag ccatctgca ctacticaa gttcttct tggcactgag  gacttctac tactgaatc atgactggcc atttgggctt ggtctgca tgtctgtt ctactgaag tatgtcaaca tgaatgcaag  calctactc ttgtctgca tcaagtgtgc acgatttgg ttctcagt acccttgg cctcatgac tgcataacaga aataagacct  gtacatcagc attgtctgct ggtgcatcat ctgctgtcc tgtgtactct ttacactct cagaaccagt gatgatact ctggcaatag  gaccaaatgc ttgtggatc ttactaccag gaatgtcaac ctggcccaagt ccgtgttat gatgaacctt ggagattga ttgggttgt</p>	P	Homo sapiens
572	190026	G Protein- Coupled Receptor JEG18	NM_032553	<p>gctggggtatt ttggagatcat gttttttctg aacattgcca tgttcattgt ggtaalggg cagatctgtg ggaggaaagg caagaagaagc  aacaggacc tgaagaaga agtgtaagg aactggcga gttgggttag ctgacctt ctgttgggca tgaatgggg  ttttgcatc ttggctggg gaaccthaaa tatcccttc atgtacctt tccacctt caatcatia caaggcttat ttatattcat  ctccactgt gctatgaagg agaalgitca gaacacagigg cggcgggcatc tctgtgtgg tagatttcgg ttacagagata  actcagattg gattgaagaca gctaccaata tcatcaagaa aagtctgtat aatciaggaa aatctttgtc ttcaagctcc attggttcca  actcaacctt tctatcatcc aatctaat ccagctctac cactattc aagaaggaata gccacacaga taatgtctcc tatgagcatt  cccttaacaa aagtggatca ctacagacgt gcttccatgg acaagctct gtcaaatcgt gccatgctgt atggagatca  aacatcaatc atccctgtcc atcagggtat tgaagggtc aggggttatt gcaatgcta ttacagaaac ttctataaaa atattatcat  gtcagacacc ttacgccaca gcacaaagt ttatgtct ttgaagaaag aatatcaatc ttacagaaatgt gaagatttgc  aagcagtgta aactgcaact agtgatgtaa atgtgtctat acctaggtaa ctgcatalat ataaggaaat tattttgtta agaaggcttt  tgtgaatc agaattttc tttaatat attcttcca tgggaagagt gicatcacia aaacttcagt acigagagata acaagacica  gtagccacag aagctatgat ttgtaaaata tataatgaa tcaagatgat cataatgcag ggagagacatt caaattagag  acaaggagga agcaalgctg aggaagacc tagatagagc tcatattact ccactaatc gttatalcig gatatacca ttittctgcat  cttcttctc aacaataac tgcctgtct ttggagact ttgaagcatt ctaaaagcac aataaaagc ctggtattc cccattgaga  gtttgtcc aaggaaatg aagtgaagaca tatgggttag tcaataat caaataat tatgaagagc tgggtctgca atagctagtc  taaaactac ttgtgtgca gtctctgt tatgtatat aagaagctga ggaagctctg caagatagat ggtgtattat ttatggatca  ggctgtgca lacaaacct gcalactat atgcagctta ctaacttc agactatc tgcitgctaa tgaatgtata  ggagaccaca ttgtaatgt tcttagatga tggagccat gcaattct agaaatcgt ctacgtgcat gctgtgtct ttacattg  ctctgggtta tctgggaagt atcaggttct gggaggcaac agcattaagt gataagaaa ggagacattc tggcaagcc  aatctgctta aaggcaagt ccagaacctg gaacttag gctttctct ctgacgaaa aacaggtagt ttgcagctg  agataggga gacttttag gctacacagc aacccaaggg acctctacc ttgtctgag cttaacacag gaagctatt  gctggctcc agcagatgat gataatga ggtatgggt ttattatc tgttccatt tgcacatcc tgcacacca tcttggggaga  caagacatt accagctg gcttacgg gggagggtg tattcagt</p> <p>MDFESGQVDP LASVLPPNL LENLSPEDSV LVRRQAQTFFF NKTLGFQDVG  PQRKTLVSYV MACSIGNITI QNLKDPVQIK IKHTRTQEVH HPICAFWDLN  KNKSFGGWNT SGCVAHRDSD ASETVCLCNH FTHFGVLM DL PRSASQLDAR  NTKVLTFISY ICGISAIFS AATLLTYVAF EKLRRDYP SK ILMNLSTALL FLNLLFLLDG  WITSFNVDGL CIAVAVLLHF FLAATFTWMG LEAHMYIAL VKVENTYIRR  YILKFCIIGW GLPALVSVV LASRNNEVY GKESYGKEKG DEFCWIQDPV  IFYVTCAGYF GVMFFLNIA M FIVVMVQICG RNGKRSNRTL REEVLRNLRS  VVSLTFLLGM TWGFAFFAWG PLNIPFMVYL FIFHFCAMKE  NVQKQWRRHL CCGRFR LADN SDWSKTATNI IKKSSDNLGK SLSSSSIGSN  STYLTSSKRS SSTTYFKRNS HTDNVSYEHS FNKSGSLRQC FHGQVLVKTG PC  caccattagg caaagatagt ttctatag agaatcagc ctgctaatha cactgtacc agggccagatg gagacaatac  agtatttga tacttatt atgcagtag alacactgic attctgtgc caggctcat agggaaataa ttgacctgt gggatctta  tggttatg aagaatacaa aacgagctgt gatatattag ataaacttag ccatctgca ctacticaa gttcttct tggcactgag  gacttctac tactgaatc atgactggcc atttgggctt ggtctgca tgtctgtt ctactgaag tatgtcaaca tgaatgcaag  calctactc ttgtctgca tcaagtgtgc acgatttgg ttctcagt acccttgg cctcatgac tgcataacaga aataagacct  gtacatcagc attgtctgct ggtgcatcat ctgctgtcc tgtgtactct ttacactct cagaaccagt gatgatact ctggcaatag  gaccaaatgc ttgtggatc ttactaccag gaatgtcaac ctggcccaagt ccgtgttat gatgaacctt ggagattga ttgggttgt</p>	A	Homo sapiens

573	190026	G Protein- Coupled Receptor JEG18	NP_115942.1	MPANYTCTRP DGDNTDFRYF IYAVTYTVIL VPGLIGNILA LWFYGYMKE TKRAVIFMIN LAIADLLQVL SLPLRIFYYL NHDWPFPGGL CMFCFYLYKYV NMYASYFLV CISVRRFWFL MYPRFHDCK QKYDLYISIA GWLIICLACV LFPLLRSDDD TSGNRKTCFV DLPTRNVNLA QSVVMMTIGE LIGFVTPLLI VLYCTWKTVL SLQDKYPMAQ DLGEKQKALK MILTCAGVFL ICFAPYHFSF PLDFLVKSNE IKSLARRVI LIFHSVALCL ASLNSCLDPV IYFSTNEFR RRLSRQDLHD SIQLHAKSFV SNHTASTMTP ELC	P	Homo sapiens	aactccgctt ctgattgtcc tatattgtac ctggaaagac gttttatcac tgcagaataa atatcccatg gcccaagalc ttggagagaa acagaagacc ttgaagatga ttcaacctg tgcaggaggia ttctaattt gctttaccac ttatcattt agttttctt tagatttctt gggtgaagtc aatgaaatta aaagctgctt agccagaagg gtagtctaa tattctatc ttgttgcatg tgcctgtctg gtcgaatc atgtctgac ccagtcata actacttt cactaatgac ttccgaagac ggtcttaaac acaagatttg catgacagca tccaactoca tgcaaatcc ttgttgatg accatacagc ttccaccatg acacttgaat latgtctaaa caaaaaacca aactgaalgt gactgaaat gcaagtacat cagaacatat ctgcaatcac caagccacag ggaagaactt gcaaaacaac acagctttc agttctgic tatctactg ctatgggaa ttactctt caaagcagga cctatttga gcatcagat ccacgattat tgaigtgac atgccatgt agtaatttt ctcaagt
574	190031	G Protein- Coupled Receptor VLGR1	AF055084	attactgat atgtatgat tgcgcgiga ttccaaaagg ttactttat gacagcatc ttctgattc ctacagttt attatctcc catggcccaa gtttgaac ttatattag ttggcttc gtacaggcac cactcatgg gagcaacaca gaaatctgt tcaaacatc attcaggaa aaagaataa tttagcgtt gagcatctt aaagatttg cagtaactta tagaactaag ttgtaggagc taagaggatc ttttaatca tgcatacga ttatgatt ttgtgttg ttgtattt ttatttg atgtatga cttggaaaga gggatattt ttacattca agaaatgga ctacagatag atcaacctc tgaatagga aacatcca ttgtgcac cataataatg aaaaatgata acgcagaagg catcatgaa ttgacccaa agtatctgc ctgcagaagc gaggaagatg ttggcctgat catgatccca gtgttgaggc tacatgaac ttatggctat ttgcacagctg attcatctc tcaagctcc tctgccagtc ccggagggtt tgaattcat ttgcattgca gtacagtcac ctccagcat gggaacaaact taagtattt aaatatctcc atcatatg acaatgaaag tgaatttag gagccattg aaatttact cactgagct actggaggag cgtctctgg gcgcacctc gtgcagcaga tcaataagc taagagtgac tctcccttg gattataag gtttcaat caaagcaaaa ttctatgc taatccaat tccacaatga ttatcact ggtgtctggag cggactggag gactctggg agagattcag gtaactggg agacagtagg acccaactc caagaagcct tactgocaca gaataagagc attgcaagcc cagtggcgg gttgtctat ttggagagag gagaaaggagg agtgagaac ataattctga caatctacc tcatgaagaa attgaagtg aagagacat cattataa ctcatctg tgaagaggaga agctaaata gactccagc ctaaaatgt tacataacc atacaagat ttgttgaccc aaatggagt ttctagttg ctctgaaac ttgtctaaag aaactaatt cagagctct ggcttggaa ggcccccgc tcaattcct ctgttcaga agatcaagg gcaccttgg agagattatg gttactggg aataagtag tgaattgac attactgaag actttctt caccagtgga ttutacca ttgctgaggg agagagtgaa gctagcttg atgtcattt gctaccagat gaggtaoctg agatagagga agattatg atccagctg ttctgtaga ggagagagcc gaactggatc tggagaagag tatcacatgg ttctgtt atgcataatg tgaoccat ggagatttg ccctgattc ggaatccag tcaatctta ttggcagaa cctattaga tcaatccaaa taaacatac ccggctgtt ggaaacttg gagatgtgct ttgtggctt cgaatctat cggatcalaa agaaagagcc atgttaacc aaaaicaga gagggcagctg gtggcaag atgtggccac ataaaagtg gacgtggc caataaagaa tcaaggctc ctatcagtg gctlaatt cacttgcaa ctgtgacag tgaattgt cgttgagact ttctatggaa tggcaaat tctcagga gcaaatctg ctgtctcc agtctgag aaagctgcca attcaggt cggattgaa tccactgt tcaactat gaacatcat gctggcaca gccagttat gattctgag agagggcat atggagctt ctgggtgccc tggagaccag gattgtctcc tgggttagaa attctgaa tcatgtgt tggcaacatg accocaacac tggggagcct ttacttcc cactgtgaac aaaggaaagg agtttctg tggagcttc ctaggccctg	A	Homo sapiens	

[illegible]

575	190031	G Protein- Coupled Receptor VLGR1	AAD55586.1	<p>ggaggactac acatggccta cagacacctic tggatgltgg tictcttgt cattticaac agtctgcagg gactttaigt tticatggtt tatttcatt tacacaacca aatgtgtgtc cctatgaagg ccagttacac tgggaaatg aatgggcaic ctggaccacg cacagccttt ttcacgccc ggagtgggaat gcctctgct ggaggggaaa tcagcaagtc caccagaat ctatcggtg ctatggagga ggigccacct gactgggaga gagcatcctt ccaacaggcc agicaggcca gccctgattt aaagccaagt ccacaaaatg gagccacgtt ccgtccict ggaggatag gccaggggic actgatagcc gatgaggagt ccaggaggti tgaigtattt atattgcat taaaactgg tcttgctc agtgcagtg ataataatc tggtcaggc agccaggagg ggggcacct gactgaccc cagatggtg agtcaggag galaccacat ccgacacat accgtagca cctcactaac cattegactg agcacacti calatttga tcactttg tgcataact cctaaact cctaaact atocactgt gtaataggaa cctgtgaatt gactggatg atatacaaa acgtgatgt tgaattgga gataaaita ctgattgat tgcacctgaa aaticactgaa taaagaaaag gtggagtcag ttigtalcag ttaatagat gttcatatic caaggaatt agtgtttt taaatcatcc tatalggcta acattgttta atgaaaglaa taatacaataa agcaatagaa tct</p>	<p>Homo sapiens</p>
				<p>MQLCIFCCCC ILFYFDLYDF GRGYDFTIQE NGLQIDQPPE IGNISIVRII IMKNDNAEGI P IEFDPKYTAF EVEDVGLIM IPVVRLHGT YVVTADFISQ SSSASPGGVD YILHGSTVTF QHGQNLFIN ISIDDNES FEEPIELLT GATGGAVLGR HL VSRILIAK SDSPFGVIRF LNQKISIAN PNSTMILSLV LERTGGLLGE IQVNWETVGP NSQEALLPQN RDIADPVSL FYFGECEGV RTILTYPH EEEVEETFI IKLHL VKGEA KLDSRAKDVLT LTIQEFDPN GVVQFAPELT SKKTYSEPLA LEGPLITTF VRRVKGTFGE IMVYWELSE EDITEDFLST SGFFTIADGE SEASFDVHLL PDEVPEIEED YVIQLVSVEG GAELDLEKSI TWFSVYANDD PHGVFALYSD RQSILGQNL RSIQINIR LAGTFGDVAV GLRISSDHKE QPIVTENAE R QLVKDGATY KVDVVPIKNQ VFLSLGSNFT LQLVTVMVLV GRFYGMPTIL QEAKS AVLPV SEKAANSQVQ FESTAFQLMN ITAGTSHVM SRRGTYGALS VAWTTGYAPG LEIPEFVVG NMTPTLGSL SFSHGEOQKGV FLWTFSPGW PFAVLHLSG VQSSAPGGAQ LRSGFIVAEI EPMGVFQFST SSRNIIVSED TQMRLHVQR LFGFHSDLIK VSYQTTAGSA KPLEDFEPVQ NGELFFQKQ TEVDFEITII NDQSEIEEF FYINLTSEI RGLQKFDVNW SPRLNDFS AVITLDND LAGMDISPE TTVA VAVDTT LPVETESTT YLSTSKTTTI LQPTNVVAIV TEATGVSAIP EKL VTLHGT AVSEKPDVAT VTANVSIHGT FSLGPSIVYI EEMKNGTFN TAEVLIRRTG GFTGNVSIV KTFGERCAQM EPNALPRGI YGISNL TWAV EEDFEEQTL TLIFLDGERE RKVSVQILDD DEPEGQEFFY VFLTNPQGA QIVEGKDDTG FAAFAMVIT GSDLHNGIIG FSEESQSGLE LREGAVMRRL HLIVTRQPNR AFEDVKVFWR VILNKTVVVL QKDGVLNMEE LQSVSGTTTC TMGQTKCFIS IELKPEKVPQ VEVYFFVELY EATAGAAINN SARFAQIKIL EDESQSLVY FSVGSRLAVA HKKATLISLQ VARDSGTGLM MSVNFSTQEL RSAETIGRTI ISPAISGKDF VITEGTLVFE PQQRSTVLDV ILTPETGSLN SFPKRFQIVL FDPKGARID KVYGTANITL VSDADSQAIW GLADQLHQPV NDDLNRVLH TISMKVATEN TDEQLSAMMH LIEKITTEGK IQAFSVA SRT LFYEILCSLI NPKRDKTRGF SHFAEVTENF AFSLLTNVTC GSPGEKSKTI LDSCPYSIL ALHWYPOQIN GHKFEKEDG YIRPERLLD VQDAEIMAGK STCKL VQFTE YSSQQWFISG NNLPTLKNKV LSLSVKGQSS QLLTNDNEVL YRIYAAEPRI IPQTSLSCLLW NQAAA SWLSD SQFCKVIEET</p>	

576	190168	G Protein- Coupled Receptor GPR58	NM_014626	ADYVECACSH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLAVLSHIF CARYSMFAAK LLTHMMAASL GTQILFLASA YASPOLAEES CSAMAAVTHY LYLCQFSWML IQSVNFWYVL VMNDEHTERR YLLFFLLSWG LPAFVVLLI VILKGIYHQS MSQIYGLIHG DLCFIPNVYA ALFTAALVPL TCLVVVFWVF IHAYQVKPW KAYDDVFRGR TNAAEIPIL YLFALISVTW LWGGLHMAVR HFWMVLVLFVI FNSLQGLYVF MVYFILHNQM CCPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPDLK PSPQNGATFP SSGYGQGS LIADEESQEFD DLIFALKTGA GLSVSDNESG QGSQEGGTLT DSQIVELRRI PIADTHL atgiaticat tiatggcagg atccatattc atcaaatat tiggcaatct tggcaatga atticcattt cctacticaa gcagctcac acacaaacca acttctcat cctctccatg gccalcacig atttctctt gggatcaccc atcatgcat atagatgat cagatcggg gagaactgct ggatitng gcttaccatt tgcagattt attatgtt tgacctgat cttagcataa catccattt tcatcttgc tcagtggcca tigtatgatt ttagctata tigtacctat tacttattt caccataata actatccag tcaataaag attgctact ctaigtgt cggctccctgg agcattigoc ttggggggg tcttccaga ggcctatga gatggaatag agggctaiga caicttggt gcttgtcca gtctctgcc agtgaigtc acaagctat gggggaccac ctgtttatg gcaggttct tcactcigg gtctatgat gtggggattt acggcaaat tttagcaga tccagaaaac atgctatgc catcaataac ttcgagaaaa atcaaaataa tcaagigaag aaagacaaaa aagctggcca aacttagga atagigatag gagtttctt attatgttgg ttctctgtt tcttacaat ttatggat ccttttga acttcttact tctgtagt ttgttgatg ccttgacatg gttggctat ttaactoca catgtaatcc gttaatatat ggttctctt atccctggt tgcagagca cgaagata ttgtcagg taaatitc agctcattg tccataatc tatgttgt atgcaaaaag aaagttagta g MYSFMAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLILSM AITDFLLGFT IMPYSMIRSV P ENCWYFGLTF CKIYYSFDLM LSITSIFHL C SVAIDRFYAI CYPLLSTKI TPVVKRLLL LCWSVPGAFA FGAVFSEAYA DGIEGYDILV ACSSCPVMF NKLLWGTTLFM AGFTPGSMM VGIYKIFAV SRKHAHAINN LRENQNNQVK KDKKAAKTLG IVIGVFLCW FPCFFTTLLD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFERRA LKYLLGKIF SSCFHNTILC MQKESE atgactataa ctatattcc cgaagacctt tccagttgt caaaattgt aataagatc ctgtctccc accaacgct ctcttcatg ccaagtgata atgtatcgg ttatgactgg agccatgatt atccattat cggaaacttg gtaataagg ttccataic gcatttcaaa cagcttcat ccccaaaa ctttcgatc ctctccatg caaccaggga ctttctcgtt ggtttgtca ttatgccata cagcataatg cgalcagtg agagtgtcgt gtacttggg gatggcttt gtaaatoca cacaagctt gacatgatgc tgcagatgc cttcaatttc caactctgt ccattgctat tgaccgatt tatgcctgt gtaacctt acattacaca accaaaatga cgaactocac cataaagcaa ctgtggcat ttgtcgtgc agtctctgt ctttttct ttgtttgat tctatctag gccgatgtt ccggtatgca gagctataag atactgtg ctgtctcaa ttctgtcc ctacttca acaattcgt ggggacataa ttgtcacta catgttct taccctggc tccatcagg ttgttatta tggcaaaatc ttatcgttt ccaaacagca tctcgtatgc atcagccatg tgcctgaaaa cacaaggggg gcagtgaataa aacacctatc caagaaaaag gacaggaaaag cagcgaagac actgggtata gtaattggggg ttgttctggc ttgtcgttg cctgtttc ttgtctgt gatgaccca taccatgact actocctcc catacataa tiggatctt tagtgggt ccgttactt aacttactt gcaacctct taticatggc ttittaatc catgtttca gaaagcattc aagtacatag tgcaggaaa aatattagc tccattcag aaactgcaaa ttgttct gaagcatt aa MDLTYPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VTMVSISHFK QLHSPNTNLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	A	Homo sapiens
577	190168	G Protein- Coupled Receptor GPR58	NP_055441.1	atgactataa ctatattcc cgaagacctt tccagttgt caaaattgt aataagatc ctgtctccc accaacgct ctcttcatg ccaagtgata atgtatcgg ttatgactgg agccatgatt atccattat cggaaacttg gtaataagg ttccataic gcatttcaaa cagcttcat ccccaaaa ctttcgatc ctctccatg caaccaggga ctttctcgtt ggtttgtca ttatgccata cagcataatg cgalcagtg agagtgtcgt gtacttggg gatggcttt gtaaatoca cacaagctt gacatgatgc tgcagatgc cttcaatttc caactctgt ccattgctat tgaccgatt tatgcctgt gtaacctt acattacaca accaaaatga cgaactocac cataaagcaa ctgtggcat ttgtcgtgc agtctctgt ctttttct ttgtttgat tctatctag gccgatgtt ccggtatgca gagctataag atactgtg ctgtctcaa ttctgtcc ctacttca acaattcgt ggggacataa ttgtcacta catgttct taccctggc tccatcagg ttgttatta tggcaaaatc ttatcgttt ccaaacagca tctcgtatgc atcagccatg tgcctgaaaa cacaaggggg gcagtgaataa aacacctatc caagaaaaag gacaggaaaag cagcgaagac actgggtata gtaattggggg ttgttctggc ttgtcgttg cctgtttc ttgtctgt gatgaccca taccatgact actocctcc catacataa tiggatctt tagtgggt ccgttactt aacttactt gcaacctct taticatggc ttittaatc catgtttca gaaagcattc aagtacatag tgcaggaaa aatattagc tccattcag aaactgcaaa ttgttct gaagcatt aa MDLTYPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VTMVSISHFK QLHSPNTNLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	P	Homo sapiens
578	190170	G Protein- Coupled Receptor GPR57	NM_014627	atgactataa ctatattcc cgaagacctt tccagttgt caaaattgt aataagatc ctgtctccc accaacgct ctcttcatg ccaagtgata atgtatcgg ttatgactgg agccatgatt atccattat cggaaacttg gtaataagg ttccataic gcatttcaaa cagcttcat ccccaaaa ctttcgatc ctctccatg caaccaggga ctttctcgtt ggtttgtca ttatgccata cagcataatg cgalcagtg agagtgtcgt gtacttggg gatggcttt gtaaatoca cacaagctt gacatgatgc tgcagatgc cttcaatttc caactctgt ccattgctat tgaccgatt tatgcctgt gtaacctt acattacaca accaaaatga cgaactocac cataaagcaa ctgtggcat ttgtcgtgc agtctctgt ctttttct ttgtttgat tctatctag gccgatgtt ccggtatgca gagctataag atactgtg ctgtctcaa ttctgtcc ctacttca acaattcgt ggggacataa ttgtcacta catgttct taccctggc tccatcagg ttgttatta tggcaaaatc ttatcgttt ccaaacagca tctcgtatgc atcagccatg tgcctgaaaa cacaaggggg gcagtgaataa aacacctatc caagaaaaag gacaggaaaag cagcgaagac actgggtata gtaattggggg ttgttctggc ttgtcgttg cctgtttc ttgtctgt gatgaccca taccatgact actocctcc catacataa tiggatctt tagtgggt ccgttactt aacttactt gcaacctct taticatggc ttittaatc catgtttca gaaagcattc aagtacatag tgcaggaaa aatattagc tccattcag aaactgcaaa ttgttct gaagcatt aa MDLTYPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VTMVSISHFK QLHSPNTNLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	A	Homo sapiens
579	190170	G Protein- Coupled Receptor	NP_055442.1	atgactataa ctatattcc cgaagacctt tccagttgt caaaattgt aataagatc ctgtctccc accaacgct ctcttcatg ccaagtgata atgtatcgg ttatgactgg agccatgatt atccattat cggaaacttg gtaataagg ttccataic gcatttcaaa cagcttcat ccccaaaa ctttcgatc ctctccatg caaccaggga ctttctcgtt ggtttgtca ttatgccata cagcataatg cgalcagtg agagtgtcgt gtacttggg gatggcttt gtaaatoca cacaagctt gacatgatgc tgcagatgc cttcaatttc caactctgt ccattgctat tgaccgatt tatgcctgt gtaacctt acattacaca accaaaatga cgaactocac cataaagcaa ctgtggcat ttgtcgtgc agtctctgt ctttttct ttgtttgat tctatctag gccgatgtt ccggtatgca gagctataag atactgtg ctgtctcaa ttctgtcc ctacttca acaattcgt ggggacataa ttgtcacta catgttct taccctggc tccatcagg ttgttatta tggcaaaatc ttatcgttt ccaaacagca tctcgtatgc atcagccatg tgcctgaaaa cacaaggggg gcagtgaataa aacacctatc caagaaaaag gacaggaaaag cagcgaagac actgggtata gtaattggggg ttgttctggc ttgtcgttg cctgtttc ttgtctgt gatgaccca taccatgact actocctcc catacataa tiggatctt tagtgggt ccgttactt aacttactt gcaacctct taticatggc ttittaatc catgtttca gaaagcattc aagtacatag tgcaggaaa aatattagc tccattcag aaactgcaaa ttgttct gaagcatt aa MDLTYPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VTMVSISHFK QLHSPNTNLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	P	Homo sapiens

GPR57

580 190188 G Protein- AB049405  
Coupled Receptor  
LGR6

DGFCFKHTSF DMMLRLTSIF HLCSIAIDRF YAVCVPLHYT TKMTNSTIKQ  
LLAFCWSVPA LFSFGLVLSE ADVSGMQSYK ILVACFNFA LTFNKFVGTI  
LFTTCFFTPG SIMVGIVGKI FIVSKQHARV ISHPENITKG AVKHLKSKK  
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gaaacctt gggaacccc aaccttcat gggaaggagaa ctgtcttga gggtcagaggg atctacgcca gcaaggttggag  
gcttgcagg gggttggccggc tttagccct ctggcttggc ctltgctga caggttgaata taccctccc catttctc ttccctctc

A Homo  
sapiens

581	190188	G Protein- Coupled Receptor LGR6	AAG17168.1	<p>ttccctttcc tctctccccc tcggtgaatg atggctgctt ctataacaaa tacaacaaa actcagcagat gtagatata gcagataggc ccagtiacctg gctccactga tcaactctct ccctgaccca taccacacgg gtagctcttg gccttgcttt ccttggtcct tectcagctt caccttgata ctgggctctt tcttgctcat gctgaagct gtaggaccaga gacctggaat ttgtctgct taagggaatat gagggaaagia aagacagtga aggggtggag ggtagata</p> <p>MRLEGGRSA RAGQNLSRAG SARRGAPRDL SMNNLTELOP GLFHHLRLE ELRLSGNHL S HIPGQAFSGL YSLKILMLQN NQLGIPAEA LWELPSLQSL DLNYNKLQEF PVAIRTLGRL QELGFHNNNI KAPEKAFMG NPLLQTIHFI DNPIQFVGRS AFQYLPKLHT LSLNGAMDIQ EFPDLKGTTS LEILTLTRAG IRLLPSGMCQ QLPRLRVLEL SHNQIEELPS LHRQKLEEI GLQHNRIWEI GADTFSQLSS LQALDLSWNA IRSHPEAFS TLHSLVKLDL TDNQLTTLPL AGLGLMHLK LKGNLALSQA FSKDSFPKLR ILEVPIAYQC CPYGMCSAFF KASQWEAED LHLDEESSK RPLGLLARQA ENHYDQDLDE LQLEMEDSKP HPSVQCSPTP GPFKCEYLF ESWGIRLAVW AIVLLSVLCN GLVLLTVFAG GPVPLPPVKF VVGAIAGANT LTGISCGLLA SVDALTFGQF SEYGARWETG LGCRATGFLA VLGSEASVLL LTLAAVQCSV SVSCVRAYGK SPSLGSVRAG VLGCLALAGL AAALPLASVG EYGASPLCLP YAPPEGQPAAL LGFTVALVMM NSFCFLVAG AYKLYCDLP RGDFAVWDC AMVRHVAWLI FADGLLYCPV AFLSFASMLG LFPVTPEAVK SVLLVVPLP ACLNPLLYLL FNPFRDDLRL RLRPRAGDSG PLAYAAAAGEL EKSSCDSTQA LVAFSDVDLI LEASEAGRPP GLETYGFPSV TLISCCQPGA PRLEGSHCVE PEGNHFGNPQ PSMDGELLRL AEGSTPAGGG LSGGGGFQPS GLALLHTY</p> <p>atgagttoca cctgacaaa cagcagcgc gagagtaaca gcagocacac gtagatgcc ctctcaaaa tgcocatcag ctcggcccaac ggcatatcc gctcaaccgt gctggtatc ttctcgccg cctcttgct cggcaacata gtagctggcgc tagtgtgca ggcgaagccg cagctgctgc aggtgaccaa ccgtttatc tttaacctc tctgaccca cctgctgcag atttgcctg tggcccccctg ggtggtggcc acctctgctg ctctctctg gccctcaac agccactct gcacggccct ggtagccctc accaactgt tgcctctgc cagcgtcaac accattgctg tgggtcagt gtagcgtctac tigtccatca tccacctct ctctacccg tccaaatga cccagcccg cgggtacctg ctctctatg gcacctggat tgtggccalc ctgcagagca ctctccact ctacggctgg ggccagctg ccttgatga gcgcaatgct ctctctoca tgaictgggg ggccagcccc agctacata ttctacgtt ggtgtcttc atogtcttc cactgattgt catgattcgg tgcactccg tgggtgtctg tgcagccccg aggcagcatg ctctctgta caatgtaag agacacagct tggtagtgcg agtcaaggac tgtgtggaga atgaggtatga agaagggaaga gagaagaagg agagttoca gtagtagagt gtagtttgc gccagcatga aggtgaggtc aaggccaagg aggccagaaat ggaagccaag gacggcagcc tgaaggocaa ggaagggaagc acgggggaaga gtagtagtag tgttagggcc aggggcagcg agtaggtcag agagagcagc acgggtggcca gcgacggcag catgtagaggtt aagggaaggca gcaccaagt tgaagggaac agcatgaagg cagacaaggc tgcacagag gtaacagat gcagcatiga ctgggtgaa gtagacatgg agtttggga agacgacatc aatticagtg agtagagct cgaaggcagtg aacatccgg agagctccc acccagctgt cgtaacagca acagcaacc tctctgccc aggtgtclacc agtgcgaagc tgcataaggc aicttctc ctatgtgta tccctggggc cctactgtt tttagcagtc ctggccgtgt ggtgtgtagt cgaaacccag gtaaccagt ggtgtgacac cataatcatc tggctttct tctgcagtg ctgcatccac cctatgtct atggctatc gcacaagacc attaagaagg aaatccagg catgctgaag aagttctct gcaagggaaga gcccccgaag gaaatagacc accagaact gcccggaaca gaggggtggga ctgaaggca gattgtcct tctacgatt ctgctacttt tcttga</p>	P	Homo sapiens
582	190414	G Protein-coupled Receptor GPR101	AF411115	<p>atgagttoca cctgacaaa cagcagcgc gagagtaaca gcagocacac gtagatgcc ctctcaaaa tgcocatcag ctcggcccaac ggcatatcc gctcaaccgt gctggtatc ttctcgccg cctcttgct cggcaacata gtagctggcgc tagtgtgca ggcgaagccg cagctgctgc aggtgaccaa ccgtttatc tttaacctc tctgaccca cctgctgcag atttgcctg tggcccccctg ggtggtggcc acctctgctg ctctctctg gccctcaac agccactct gcacggccct ggtagccctc accaactgt tgcctctgc cagcgtcaac accattgctg tgggtcagt gtagcgtctac tigtccatca tccacctct ctctacccg tccaaatga cccagcccg cgggtacctg ctctctatg gcacctggat tgtggccalc ctgcagagca ctctccact ctacggctgg ggccagctg ccttgatga gcgcaatgct ctctctoca tgaictgggg ggccagcccc agctacata ttctacgtt ggtgtcttc atogtcttc cactgattgt catgattcgg tgcactccg tgggtgtctg tgcagccccg aggcagcatg ctctctgta caatgtaag agacacagct tggtagtgcg agtcaaggac tgtgtggaga atgaggtatga agaagggaaga gagaagaagg agagttoca gtagtagagt gtagtttgc gccagcatga aggtgaggtc aaggccaagg aggccagaaat ggaagccaag gacggcagcc tgaaggocaa ggaagggaagc acgggggaaga gtagtagtag tgttagggcc aggggcagcg agtaggtcag agagagcagc acgggtggcca gcgacggcag catgtagaggtt aagggaaggca gcaccaagt tgaagggaac agcatgaagg cagacaaggc tgcacagag gtaacagat gcagcatiga ctgggtgaa gtagacatgg agtttggga agacgacatc aatticagtg agtagagct cgaaggcagtg aacatccgg agagctccc acccagctgt cgtaacagca acagcaacc tctctgccc aggtgtclacc agtgcgaagc tgcataaggc aicttctc ctatgtgta tccctggggc cctactgtt tttagcagtc ctggccgtgt ggtgtgtagt cgaaacccag gtaaccagt ggtgtgacac cataatcatc tggctttct tctgcagtg ctgcatccac cctatgtct atggctatc gcacaagacc attaagaagg aaatccagg catgctgaag aagttctct gcaagggaaga gcccccgaag gaaatagacc accagaact gcccggaaca gaggggtggga ctgaaggca gattgtcct tctacgatt ctgctacttt tcttga</p>	A	Homo sapiens

583	190414	G Protein-coupled Receptor GPR101	CAC33098.1	MTSTCTNSTR ESNSSHTCMP LSKMPISLAH GIIRSTVLVI FLAASFVGNL VLALVLQRKP P QLLQVTRNFI FNLLVTDLLQ ISLVAPWVVA TSVPLFWPLN SHFCTALVSL THLFAFASVN TIVLVSVDRY LSIHPLSYP SKMTQRRGYL LLYGTWIVAI LQSTPPLYGW GQAAFDERNA LCSMIWGASP SYTILSVVSF IVIPLIVMIA CYSVVFCAAR RQHALLYNVK RSHLEVRKD CVENEDEGA EKKEEFQDES EFRROHEGEV KAKEGRMEAK DGLSKAKESG TGTSSEVEA RGSEEVRESS TVASDGSMEG KEGSTKVEEN SMKADKGRTE VNQCSIDLGE DGMFEFGEDDI NFSEDDVEAV NIPESLPPSR RNSNSNPPLP RYQCKAAKV IFIHSYVL SLGPYCFCLAV LAVWVDVETQ VPQWVITIII WLFFLQCCCH PYVYGYMHKT IKKEIQDMLK KFFCKEKKPPK EDSPDLPLPGT EGGTEGKIVP SYDSATFP	Homo sapiens
584	190418	Inflammation- Related G Protein-Coupled Receptor EX33	NM_020370	taactgtcca ccagaaagga cgtctcttg ggtgagtga actcttcca ttatagaagc aattgaagc tgaagaactc agcctctatc A atgtggaaca gctctgaagc caactctcc tgciaacatg agtctg'gt gggctatcgt taigtgcag ttatgtggg gggtgtgtg gcttgacag gcacogtggg caatgtctc acctacttg cttgtggcat ccagoccaa gctcgtaccc gattcaact gctcatagcc aactcacac tggctgaict cctctactgc agctctctc agcctctc tgtggacacc taactccacc tgcactggcg cacoggtgcc acctctgca gggtaittgg gctctctt ttgcttcca attctgtc catctgacc ctcgtccca tcgcactggg acgtactc ctcattgcc acctaaagt ttitcccaa gtttcagtc ccaaggggat agtgcggca ctgttgagca cctgggtgt gggcgtggcc agcttgcic cctctggcc tatttatac ciggtaaccig tagctgacac ctgcagctt gaccgcatcc gagcggcgcc ttacaccac atctcatgg gcatctact tgtctggg ctcagcagtg ttggcatct ctatggctc atccaccgc aggtcaaacg agcagcacag gcactggacc aalacaagt ggcagagga agcatocact ocaacctgt ggccaggact gatgagocca tgcctgtgctg ttccaggag ctggacagca ggttagcatc agggagacc agtgaggaga tttcatciga gccagtcagt cctgcacca ccagaccct ggaagggagac tcatcagaag tgggagacca galcaacagc aagagagcta agcagatggc agagaaaaag cctccagaag catctgcca aagocagcca attaaaggag ccagaaagagc tocggattct tcatcggaat tgggaagt gactcgaatg tgtttgtctg tttctctctg cttggcctg agctacatcc cctctgtct gctcaacatt ctggatgcca ggtccaggc tcccgaggcg gtcacatgc ttgtgcgca cctcactgg ctcaatggt gcatcaacc tgtgtctat gcagccatga accgccaatt ccgccaagca tatggtcca tttaaaag agggcccg agttccata ggctccatga gaactgtgac cctagtcacc agaaltcagg actgtctct ccaggaccaa agtggccagg taataggaga ataggtgaaa taacacatgt gggcatttc acaacaatct ctcocagcc toccaaatca agtcttcca tcactgac aatgttcag ccttagactg cccaaggagt attataat attataat gaattctgt cttttaaaa aaaaaaata aaaaaagaaa aaaaaaaaa aaaaaaaa aaaaa	Homo sapiens
585	190418	Inflammation- Related G Protein-Coupled Receptor EX33	NP_065103.1	MWNSSDANFS CYHESVLGYR YVAVSWGIVV AVTGTGNNVL TLLALAIQPK P LRTRFNLLIA NLTLADLLYC TLLQPFVSVDI YLHLHWRTGA TFCRVFGLLL FASNSVILT LCLIALGRYL LIAHPKLFQ VFSKAGIVLA LVSTWVVGVA SFAPLWPIYI LVPVVCTCF DRIRGRPYT ILMGIYFVLG LSSVGIFYCL IHRQVKRAAQ ALDQYKLRQA SIHSHVART DEAMPGRFQE LDSRLASGP SEGISSEPV AATTQTLEGD SSEVGDQINS KRAQMAES PPEASAKAQ IKGARRAPDS SSEFGKVTRM CFAVFLCFAL SYPFLLLNI LDARVQAPRV VHMLAANLTW LNGCINPVLY AAMNRQFRQA YGSILKRGR SFHRLH	Homo sapiens
586	190419	G Protein- Coupled Receptor Ls190419	AJ303165	ctttgtcca gagctaac agttttct cttccacag caaatatct gacagtgatc atctctccc agctgtggc aagaagacag A aagctctct acaatatct ctggcaact gctgtgcg acatctgtt cctctttt atagtgtt gggactct gttggaagat ttcatctga acatcagat gctcaggc cccgacaaga tcatagaagt gctggaatc tcatcatc acactccat atggattact	Homo sapiens



587	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	LCFRAKPVFL LSTANILTVI ILSQLVARRQ KSSYNLLAL AAADILVLFF IVFVDFLLED FILNMQMPQV PDKIEVLEF SSHTSIWIT VPLTIDRYIA VCHPLKYHTV SYPARTRKVI VSVYITCFLT SIPYYWPNPNI WTEDYISTSV HHVLIWHCF TVYLVPCSIF FILNSIIVYK LRRKSNFRLR GYSTGKTTAL LFTTISFAT LWAPRUMIL YHLYGAPIQN RWLVHIMSDI ANMLALLNTA INFFLYCFIS KRFR	P	Homo sapiens
588	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NM_020377	aaagticta agttgaagc gtcagcttca accaaacaa ttaattggctia ttctacatc aaaaatcagg aatthaaat ttatttgaa atgtaalgca gcatgtaga aagacttaac cagtgtttia aaactcaact ttcaagagaa agatagatt gctcctgtt tctataaac ctagagagat gtaacagta agcaagagg aaaaaggga aatcacaaag taacttttg tctgtttc tttaaccc agcatggaga gaaaatttat gtccttgcaa ccatcatct ccgtatcaga aatggcaacc aatggcaact tcagcaataa caacagcagg aactgacaa ttgaaaact caagagagaa ttuticcaa ttgtatct gataatatt ttctggggag tcttgggaaa tgggtgttcc alatagttt tcttgagcc italaagaag tccacatctg tgaacgttt catgtanaat ctggccattt cagatctct gttcataagc acgttccct tcagggtctga ctattctt agaggctoca atgggalatt tggagacctg gctgagga ttatgctta ttctgttat gtcaacatgt acagcagtat ttattctg accgtgtgta gttgtgtggt ttocctggca atggttccac octtccgtct tctgcatg accagatca ggaagctgt gattctgtt gggatcatat ggaatctat catgcttcc tcaataatg tcttggagac tggctctgag cagaacggca gttgacatc atgcttagag ctgaatctct ataaaatgc taagctgag accatgaact atatgctt gggtgtgggc tgcctgtctg cattttcac actcagcatc ttatctgct gtaatctg ggtctgtta aaggtggag tccagaatc ggggctgtgg gttttcaca ggaaggcact gaacacatc atcatcact tgaatctt ctctgtgt tcttccct atcacact gaggaacct cacttgacga catggaaagt ggggttatgc aaagacagac tgcataaagc ttggttatc acactggct tggcagcagc caatgctgt tcaatctc tgccttata ctgtgtgg gagaattta aggacagact aagctctgca ctcagaanaa gccatccaca gaagggcaag acaaatgtgt ttctctgt tagtgtgtgg ttgaagaagg aaacaagagt ataaggagct cttagatgag acctgttt gtaactgt gttcacttc atcatcat agttccaaa tgaatttga ttacatcac tccacaanaa tgtgtattc taatattag ttgaacatia ctittgtta taagacctac ttcaaaaat ttatcagtg tatttcagt tgttgagct taatgaaggga tacaggaggga aaaaatcccta cttagtctt gttggctgaa atatcagact gggaaaaat gcaaaagcaca ttggatctta ctitttca gatttgaaac cagatctgt gccaatcagg ctcttaaat tcttcaaaag agccaact tcccaagct ctccagctcc cctgtctct tcaatccct gatatatagc aactaacgac gctactggaa gccocagagc agaaaaaag cacatccata gattcaggga aagactaact gttgaagaaga aggtctgtct atacaanaag agcatcaagt cccaagttaa gacagtga gaagaaggagg agaaagtgt gagaagaaga gaaatggcaa taagtggagg aaggaagaa ttacttg attgaggaga aggttaac acactgaag caacatatt tcaactgt ctctgtcc aggtgtatag gaaggacagg aaaaagtga ggaagatct gggcatgccc ctaggaaatg aagaatgt gtaagaatg gaaggaggat catcaaggac atgtatctca aatttttt gagatgcagg ttatgtacc ttgtcagt tctctccc attaatcat tgggatggaa gccaaaaa aagagggtgc ctctgagagat taggggtgag caticaaagg aagatggag tagagggcaa atagcaaaag ttgtgtcact cctgaatc tatataact tccgaagaag atgaagagg agatgtctg ttcccttg agatagtgta gaaaacact agatagtg aggggtct ttctgtccat tgaacaagg ctgaagatc taccactac tatccact accatgtac tgaacaact tgaatgcagt	A	Homo sapiens

589	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	<p>ctccctgcag ggagattat gccaggcact tiacattgt tgaatccat accaaagcic tgaattccat ttacagctg aagaaatiga agctiaaga aatlaagaag ctgtttiaag ttacacagc taglaagagi tttaaaatc tctgtgcaga agtgtggct gggtgctc cccacacta cccgtgtaa cttocaggaa gattgttga aagtctgaat aaaagctgic cttcttacc aattctcc ccctccac tctacaaga aaacaaaag ttctctca gattgtiga ctaatgac aglaaagggt ggagggtgata tggcattcgt aaagtaggga gggaatagt cagctgcat actaaac</p> <p>MERKFMSLQP SISVSEMEPN GTFNNNSRN CTIENFKREF FPIVYLIIFF WGVLGNGLSI P YVFLQPKKS TSVNVFMLNL AISDLLFIST LPRADYYLR GSNWTFGDLA CRMSYSLYV NMYSSYFLT VLSVVRFLAM VHPFRLHVT SIRS AWILCG IIWILIMASS IMLLDSGSEQ NGSVTSCLEL NLYKIAKLQT MNIALVVG LPPFFILSIC YLLIIRVLLK VEVPESGLRV SHRKALTTII ILLIFFLCF LPYHILRTVH LTTWKVGLCK DRHKALVTI LALAAANACF NPLLYVFAGE NFKDRLSAL RKHPQKAKT KCVFVSVWL RKETRV A ctgtgtgc acgtgtcga caaatctaa cttctcaagg actocaaaa ccaagagacac caggagccgtg aatggggaac gatttgtca gctacgagta tggggattac agcgacctct cggaccgccc tgtggactgc ctggaatggcg cctgcctggc catcgacccg ctgcgcgtgg ccccgctccc actgtatgoc gccattctcc tgggtgggggt gccggggcaat gccatgggtgg cctgggtggc tgggaagggtg gcccgccgga gggtgggtgc cactgtgtg cttaccctgg ccgtggcgga ttgtctgtc tgtttgtc tgcctact ggcatggccc attgcccgtg gggtggcctg gccgtatgggt gccgtgggggt gtcggggcgct gccctcac atcgtgtga ccatgtgc caggtctcgt cctctggcag cttcagtc cgtactctgc ttctgtgctc tcggggcctgc ctgtgtgtc acgtgtcagc gggtgtgcgt gggtgggtgg cagctggggc actggcctg ctgtctaccc tgcctccgc cactacccgc cgtgtgcacc aggtgcactt cccagcccggt ctgcagtggt tgggtggacta cggcgctcc locagaccg agaatgcgtt gactgcocat cgtgttttt tggcttctt gggtggccctg gttggccgtgg ccagctgcca cagtgcctc ctgtgtgggg cagcccgagc ctggggccg cttgggcacag ccatgtgtgt gggtgttt gtctgtgg caccctacca cctgtgggg ctgtgtgcca ctgtggggc cccgaaactcc gcatctctgt tggggggcct gggggtgaa cccctatcg tgggcttgc cctgcctcac agctgcctca atccatgct cttctgtat ttgggggggg ctcaactcg ccggctcag cagctgtcgt gtcactgggc cctgagggtg tccaggcc agggacgaaag tgtggacagc aagaaatoca ccagccatga cctgtgtcgt gtagtggagg ttaggtgtg agagacattg tgggtgtgta tctttatc tcatttaca agactggctt caggcatagc tggatccagg agtcaatga tgtcttatt ttattcttc cttactcaa cagatacca tcagtact gctatgca aggcctttt aggcactaga gatatagcag tgaacaaaac agacaaaat cctgccc MGNDSVSYEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAAIFLVGV P PGNAMVAWVA GKVARRRVGA TWLLHLAVAD LLCCLSLPIL AVPIARGGHW PYGAVGCRAL PSIIILLTMYA SVLLLAALSA DLCLALGPA WWSTVQRACG VQVACGAAWT LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGFL GPLVAVASCH SALLCWAARR CRPLGTAIVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRQLR RSLPAACHWA LRESQGQDES VDSKKSTSHD LVSEMEV algtggggc ctgtgtct gggtccagc ctgtggctc tctgcaacc tgggtggggg gcccattgt gccgtgaca gcaactagg algaaggggg actatgtct gggtggggctg ttcccttgg ggcaggccga ggaggctggc cttcgagcc ggacaggcc cagcagcct gttgtacca ggtacagagg tgggtggggc tgggtgggg tcaagggtgac caggtgtggg gtgtctcga gctggggcg aggtggcat ctgcgtgtct gttgtggccc aggtgtctct caaagggct gctctgggca ctggccatga aatggccgt gggtggatc aacaacagt cggatctgt gccgtgggtg cgtctgggt acgacctt tgatagctg tggagcctg tgggtggcat gaagccagc ctaatgtcc tggcaaggc aggcagccgc gacatggccg</p>	Homo sapiens
590	190437	G Protein- Coupled Receptor C5L2	NM_018485	<p>ctgtgtgc acgtgtcga caaatctaa cttctcaagg actocaaaa ccaagagacac caggagccgtg aatggggaac gatttgtca gctacgagta tggggattac agcgacctct cggaccgccc tgtggactgc ctggaatggcg cctgcctggc catcgacccg ctgcgcgtgg ccccgctccc actgtatgoc gccattctcc tgggtgggggt gccggggcaat gccatgggtgg cctgggtggc tgggaagggtg gcccgccgga gggtgggtgc cactgtgtg cttaccctgg ccgtggcgga ttgtctgtc tgtttgtc tgcctact ggcatggccc attgcccgtg gggtggcctg gccgtatgggt gccgtgggggt gtcggggcgct gccctcac atcgtgtga ccatgtgc caggtctcgt cctctggcag cttcagtc cgtactctgc ttctgtgctc tcggggcctgc ctgtgtgtc acgtgtcagc gggtgtgcgt gggtgggtgg cagctggggc actggcctg ctgtctaccc tgcctccgc cactacccgc cgtgtgcacc aggtgcactt cccagcccggt ctgcagtggt tgggtggacta cggcgctcc locagaccg agaatgcgtt gactgcocat cgtgttttt tggcttctt gggtggccctg gttggccgtgg ccagctgcca cagtgcctc ctgtgtgggg cagcccgagc ctggggccg cttgggcacag ccatgtgtgt gggtgttt gtctgtgg caccctacca cctgtgggg ctgtgtgcca ctgtggggc cccgaaactcc gcatctctgt tggggggcct gggggtgaa cccctatcg tgggcttgc cctgcctcac agctgcctca atccatgct cttctgtat ttgggggggg ctcaactcg ccggctcag cagctgtcgt gtcactgggc cctgagggtg tccaggcc agggacgaaag tgtggacagc aagaaatoca ccagccatga cctgtgtcgt gtagtggagg ttaggtgtg agagacattg tgggtgtgta tctttatc tcatttaca agactggctt caggcatagc tggatccagg agtcaatga tgtcttatt ttattcttc cttactcaa cagatacca tcagtact gctatgca aggcctttt aggcactaga gatatagcag tgaacaaaac agacaaaat cctgccc MGNDSVSYEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAAIFLVGV P PGNAMVAWVA GKVARRRVGA TWLLHLAVAD LLCCLSLPIL AVPIARGGHW PYGAVGCRAL PSIIILLTMYA SVLLLAALSA DLCLALGPA WWSTVQRACG VQVACGAAWT LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGFL GPLVAVASCH SALLCWAARR CRPLGTAIVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRQLR RSLPAACHWA LRESQGQDES VDSKKSTSHD LVSEMEV algtggggc ctgtgtct gggtccagc ctgtggctc tctgcaacc tgggtggggg gcccattgt gccgtgaca gcaactagg algaaggggg actatgtct gggtggggctg ttcccttgg ggcaggccga ggaggctggc cttcgagcc ggacaggcc cagcagcct gttgtacca ggtacagagg tgggtggggc tgggtgggg tcaagggtgac caggtgtggg gtgtctcga gctggggcg aggtggcat ctgcgtgtct gttgtggccc aggtgtctct caaagggct gctctgggca ctggccatga aatggccgt gggtggatc aacaacagt cggatctgt gccgtgggtg cgtctgggt acgacctt tgatagctg tggagcctg tgggtggcat gaagccagc ctaatgtcc tggcaaggc aggcagccgc gacatggccg</p>	Homo sapiens
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Homo  
sapiens

A

LG95579

G Protein-  
Coupled Receptor  
Ls190484

190484

594

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P

P

595

ENSMPT2619

G Protein-  
Coupled Receptor  
Ls190484

190484

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Homo  
sapiens

596	190595	G Protein- Coupled Receptor SH120	NM_016334	agcacctggg aanaaggcaga ccgtgttgagg gggcctgttgg cccacagctg ctgttggcctc ggggaggttggg aagtggagggc aggagccttc ctacacctic gccatgaggt tcttgatcaga cccagcatic algattacct cccaaiaact atttttggg ttgggtggc ttttctcat gcgccaattg ttaagaact algagatacg tcatgtgtt gtacagggtga tcttccgt gacgtttgca tttcttgca ccatgttga gctcatcatic ttgaaact taggagtiatt gaalagcagc tccgttiatt ttacitggaa aatgaacacgtg tgcgtaatic tgcgtatcct gggtttcatg gtgcttttt acatiggcta ttatattg agcaatacc gactactgca taaacaacga ctgcttttt cctgtctctt atggctggacc ttatgtatt tcttctggaa actaggagat cctttccca ttctagccc aaaacatggg atcttaloa tagaacagct catcagccgg gtgtgttga ttggagtagc tctatcctgt cttctttcgt gatttgggc tgcataacg ccatcacit acatgtctta ctctcaggg aatgtgactg acacagatat tctagccctg gaaaggagac tgcgcaaac catggatatg alcataagca aaaaagaaag gatggcaatg gcacggagaa caatgttcca gaagggggaa gtcataaaca aaocatcagg tttcggggga atgataaaaa ggtttaccac ttacgcatca ggaagtggaa atcttactc tatitacacag gaagtggalg ctttggaaaga attaagcagg cagctttttc tggaaacagc tcatctatat gctaacagg agagaataga atactccaaa accitcaagg ggaaatatt taattttt gggttacttt tcttattia ctgtgttgg aaattttca tggctaacat caatattgt ttgatcgag ttgggaaac ggatcctgtc acaaggagca ttgagatcac tggtaattat ctgggaaatcc aattgtatgt gaagtittgg tccacaaca tttcttcat tcttgttga ataaticg tcaatocal cagaggattg ctgatactc ttaccaggt ctttatgcc atcttagca gtaagtctc caatgtcatt gtctgtctat tagcacagat aatgggcaag tactttgtc cctctgtgtc gctgaicoga atgagiatgc ctttagaata ccgaccata atcacgaag tcttggaga acttgagtc aacttctac accgttgggt tgaigtatc ttcttggta ggctctctc tagcalact ttcttatt ttgctcaca acaggacaca ggaagacaaa tggcaccttg aacttaagcc tactacagac tgttagaggc cagtggttnc aaaaattaga tataagaggg gggaaaaalg gaaacagggc ctgacattt ataaacaac aaatgtctat ggtagcatt ttaccttca tagcalact ctccctc aggtgatalact atgacatga gtagcatcag ccagaacatg agaggagaa ctaactcaag acaatactca gcaagagca tccgtgttgg atatgaggtt ggtttagagg cggagaggag ocaagaaact aaaggtagaa aatacacctg aacttgggg caagacatgt ctatggtagc tgaagcaaac acgtataggat tccgttttaa ggttcatag gaagaggtia tagtttgc ttgagatga ctaataaaa tcaagagact t MSFLIDSSIM ITSQILFFGF GWLFFMRQLF KDYEIRQYVV QVIFSVTFAF SCTMFELIF P EILGVLNSS RYFWKMNLC VILLVFMV PFYIGYFVS NIRLLHKQRL LFSCLLWLTF MYFFWKLGDV FPILSPKHGI LSIEQLISRV GVIGVTLMAL LSGFGAVNCP YTYMSYFLRN VTDIDLAL RRLQTMDMI ISKKKRMAMA RRTMFQKGEV HNKPSGFWGM IKSVTTSAG SENLTLIQE VDALEELSRQ LFLETADLYA TKERIEYSKT FKGYFNFELG YFFSYCVWK IFMATINIVF DRVGKTDVPT RGEITVNYL GIQFDVKFWS QHISFILVGI IIVTSIRGLL ITLTKFFYAI SSSKSSNVIV LLLAQIMGMV FVSSVLLIRM SMPLEYRTII TEVLGELQFN FYHRWFDVIF LVSALESSILF LYLAHKQAPE KQMAP	A	Homo sapiens
597	190595	G Protein- Coupled Receptor SH120	NP_057418.1	aggctcagg cgggctgtcg tggagcgggg gccgcggcgg cgcgcagagag atgtgactcg ggcgcgaaggc cagctggagc gtcgcgtcg cgggcccgcg ggggtcgaat gttcgttggca tcaagagaga agatgagagc tccacagggtg ctacacttcc tcttgcctt cgtgatacc tgggtgctc ctgaaaacgc cagcacatcc cgaaggcttgg ggcctggacct cctccctcag tacgttccc tgtgcgaact ggaacgccatc tggggcatg tgggtggagg ggttggccggg gccggcgccc tcatcacact gcctctgatg ctacatccc tgggtcggct gcccttcatc aagggagaaagg agaaagagag ccttgggggc ctccactttc tgttctctct ggggacctg ggcctcttgg gctgacgtt tgccttcatc atccaggagg acgagagacat ctgctctgic cgccgcttcc tctggggcgt cctcttggc ctctgtctt cctgctgtc tggagcagga tggcgcgctg gggggcttgg ggggcaggc acggggcccgc cgggctggga gctgggtggg ctggcgctgt gcttgaagt ggttgaagtc atcatcgctg tggagtggct ggttgcaccc gttgtgcgtg acacaaggcc agcctgcgcgc taccagccca tggactttgt gatggccctc	P	Homo sapiens
598	190599	G Protein- Coupled Receptor GPC5B	NM_016235		A	Homo sapiens

599	190599	G Protein- Coupled Receptor GPCR5B	NP_057319.1	<p>atctaacgaca tgggtactgct tgggtgcacc ctaggggctgg ccctctcac tctgtgcggc aagttaaga ggtgggaagct  gaaaggggcc ttctctca tcaagcctt cctctctgtg ctactctggg tggccctggat gaccatgtac cttctgggca atgtcaagct  gcagcaggggg gtagccttgg aagacccccc cttggcccatc agcctggcggc ccagcggctg ggtctctgic atctccacg  ccatccctga gataccatgc accctctgc cagcccttga ggaagaacag cccaactact tggacacgic gcagccccagg  atgcgggaga cggccttcca gtaggagcgtg cagctgcgcg gggccctatct gggagaacag gctctctcca tggatgaaca  caatgcagct ctccgaacag caggaattcc caacggcagc ttggggaanaa gaccagtg ggcgttgggg aanaagaccca  ggcgtccgt tagnaagcaac gtagacgc caactgaat ggcctgtcgtg ctcaacgggtg ggaacalccc aactgctccg  ccaagtaca caggaaagaca ccttgggtga aagactttaa gtccagaga gtccaatgt ctctaccga ttgctctccc tggctgtgic  tttctgagg gagaatcgg taacagttgc gaaaccaggg ccgtcacag ccagggaaat tggaaatct agccaaaggggg  atttctigia aatgtgaaca ctgacgaact gaaagactiaa caccgactgc ccgccccccc cctgccacac acacagacac  gtaataccag accaactca atcccggca actaaagcaa agctaatgc aaatgattt aggtctacgt gaaatgtggg  ctgggaagac ttttcatcc tctgggggta gaaagaac aaatcacag ctgggtggggc agactgggtgt tggttggaggg  tgggggggct ccactctat cactctccc cagcaagtc tggaccocag gtagccctct ggagatgacc gttgcgttga  ggacaaatgg ggaattgg accgcttgc ctgggtgtt gcaatttca ggggggggtcag gaaagttaag gagggtgtgg  gtgggtatcc aaggtgaggg ccaactgaat cgtgggggtga gctttatagc cagtatagagt ggaaggagacc tggcaltgtc  caagaagag gccccttggg tgalgaagtg accatcat tggaaagtg atcaaccact gtctcttca tggggctctt gcttaatgt  ctatgtgtg aacacagggc ccggcccttc cctgttagag ccatagaat atcttgctt ggggagcag tccctctc  ccttgatcat ctgcctgt tctacact acgggtgtat ctcaaatcc ttccaatc ttatccctt attacttca agagctocaa  tgggggtccc agctgaagc ccctccggga ggcaggggtgg aagcagggca ccaaggcagg ttctccgca tgalgtac  tagcagggtc taggggttc ccactaggat gcagaatga cctctcgtc cctcaagc agtgacacat cgggtcctt  ccgttgctat ggtgaat cctggatga atggatcaca tgaagggtc ttgtctctt tggagggtgt gggggatatt ttgtttgt  tttttcag gttcatgaa aacagccct tccaagcc attgttctg tcaigtct caictgtct gagaagica ttactttgt  attagcatt tgaacatc cggccattca aagcccccgt gtctctga cgtttggc agcataact ctgacatga ttcaaacag  agtttaacc tgaaggcatg gaaatataa atgaagggtg gtctctgc agatactia atactatct tgcctttct ataaactac  ccataagct ttacctta aagaanaatg aaaaaggta ggtttgggg gcccggggag gactgaccgc ttcaagcc  agtagcttg agctgaglat gttcaataa accctttgat atttcaaa aaaaaaaa aaaaaaaa  MFVASERKMR AHQVLTFLLL FVITSVASEN ASTSRGCGLD LLPQYVSLCD  LDAIWGVVE AVAGAGALIT LLLMLLL VR LPFIKEKEKK SPVGLHFLFL  LGTGLGLT FAFIQEDET ICVRRFLWG VLFALCFSL LSQAWRVRL  VRHGTGPAGW QLVGLALCLM LVQVIAVEW LVLTVLRDTR PACAYEPMDF  VMALIYDMVL LVVTLGLALF TLGKFKRWK LNGAFLITA FLSVLIWVAV  MTMYLFGNVK LQQGDWNP TLAITLAASG WVFVIFHAP EIHCTLLPAL  QENTPNYEDT SQPRMRETAF EEDVQLPRAY MENKAFMSDE HNAALRTAGF  PNGSLGKRPS GSLGKRPSAP FRSNVYQPT MAVVLNGGTI PTAPPSHTGR HLW  gtagcctga ggtgttggca gggccggccc ctgcagctcg gagaagcag cagggaggg gctccggag gcaggttcgg  ctggaaagaa ccgctctgc ttgtctac acttgcgcaa atgtctcga gactctcac atagcatatt ggtalatcaa aatgaatgc  aagggaacca aataacata atgaagga gtaaaagta aataaatg gaagatcgc agtaagaa gaccacagg  agaaggacaga aatgaagca ggtttatc atgtgattt cagcaggtct tcttgaat taactaaaa tatgactgt ctcttcag  agaactgtc tttagtgc cagttagc aaacaacca gcccctagc gtaactatc tgcattctt gatactact gggaaatat  taataatat ccttacta ggaatgagaa gaaaaaacac ctgtcaaat ttatggaat attttgcat ttactagca ttgtgtatc</p>	P	Homo sapiens
600	190602	G Protein- Coupled Receptor GPCR150	NM_014373	<p>atctaacgaca tgggtactgct tgggtgcacc ctaggggctgg ccctctcac tctgtgcggc aagttaaga ggtgggaagct  gaaaggggcc ttctctca tcaagcctt cctctctgtg ctactctggg tggccctggat gaccatgtac cttctgggca atgtcaagct  gcagcaggggg gtagccttgg aagacccccc cttggcccatc agcctggcggc ccagcggctg ggtctctgic atctccacg  ccatccctga gataccatgc accctctgc cagcccttga ggaagaacag cccaactact tggacacgic gcagccccagg  atgcgggaga cggccttcca gtaggagcgtg cagctgcgcg gggccctatct gggagaacag gctctctcca tggatgaaca  caatgcagct ctccgaacag caggaattcc caacggcagc ttggggaanaa gaccagtg ggcgttgggg aanaagaccca  ggcgtccgt tagnaagcaac gtagacgc caactgaat ggcctgtcgtg ctcaacgggtg ggaacalccc aactgctccg  ccaagtaca caggaaagaca ccttgggtga aagactttaa gtccagaga gtccaatgt ctctaccga ttgctctccc tggctgtgic  tttctgagg gagaatcgg taacagttgc gaaaccaggg ccgtcacag ccagggaaat tggaaatct agccaaaggggg  atttctigia aatgtgaaca ctgacgaact gaaagactiaa caccgactgc ccgccccccc cctgccacac acacagacac  gtaataccag accaactca atcccggca actaaagcaa agctaatgc aaatgattt aggtctacgt gaaatgtggg  ctgggaagac ttttcatcc tctgggggta gaaagaac aaatcacag ctgggtggggc agactgggtgt tggttggaggg  tgggggggct ccactctat cactctccc cagcaagtc tggaccocag gtagccctct ggagatgacc gttgcgttga  ggacaaatgg ggaattgg accgcttgc ctgggtgtt gcaatttca ggggggggtcag gaaagttaag gagggtgtgg  gtgggtatcc aaggtgaggg ccaactgaat cgtgggggtga gctttatagc cagtatagagt ggaaggagacc tggcaltgtc  caagaagag gccccttggg tgalgaagtg accatcat tggaaagtg atcaaccact gtctcttca tggggctctt gcttaatgt  ctatgtgtg aacacagggc ccggcccttc cctgttagag ccatagaat atcttgctt ggggagcag tccctctc  ccttgatcat ctgcctgt tctacact acgggtgtat ctcaaatcc ttccaatc ttatccctt attacttca agagctocaa  tgggggtccc agctgaagc ccctccggga ggcaggggtgg aagcagggca ccaaggcagg ttctccgca tgalgtac  tagcagggtc taggggttc ccactaggat gcagaatga cctctcgtc cctcaagc agtgacacat cgggtcctt  ccgttgctat ggtgaat cctggatga atggatcaca tgaagggtc ttgtctctt tggagggtgt gggggatatt ttgtttgt  tttttcag gttcatgaa aacagccct tccaagcc attgttctg tcaigtct caictgtct gagaagica ttactttgt  attagcatt tgaacatc cggccattca aagcccccgt gtctctga cgtttggc agcataact ctgacatga ttcaaacag  agtttaacc tgaaggcatg gaaatataa atgaagggtg gtctctgc agatactia atactatct tgcctttct ataaactac  ccataagct ttacctta aagaanaatg aaaaaggta ggtttgggg gcccggggag gactgaccgc ttcaagcc  agtagcttg agctgaglat gttcaataa accctttgat atttcaaa aaaaaaaa aaaaaaaa  MFVASERKMR AHQVLTFLLL FVITSVASEN ASTSRGCGLD LLPQYVSLCD  LDAIWGVVE AVAGAGALIT LLLMLLL VR LPFIKEKEKK SPVGLHFLFL  LGTGLGLT FAFIQEDET ICVRRFLWG VLFALCFSL LSQAWRVRL  VRHGTGPAGW QLVGLALCLM LVQVIAVEW LVLTVLRDTR PACAYEPMDF  VMALIYDMVL LVVTLGLALF TLGKFKRWK LNGAFLITA FLSVLIWVAV  MTMYLFGNVK LQQGDWNP TLAITLAASG WVFVIFHAP EIHCTLLPAL  QENTPNYEDT SQPRMRETAF EEDVQLPRAY MENKAFMSDE HNAALRTAGF  PNGSLGKRPS GSLGKRPSAP FRSNVYQPT MAVVLNGGTI PTAPPSHTGR HLW  gtagcctga ggtgttggca gggccggccc ctgcagctcg gagaagcag cagggaggg gctccggag gcaggttcgg  ctggaaagaa ccgctctgc ttgtctac acttgcgcaa atgtctcga gactctcac atagcatatt ggtalatcaa aatgaatgc  aagggaacca aataacata atgaagga gtaaaagta aataaatg gaagatcgc agtaagaa gaccacagg  agaaggacaga aatgaagca ggtttatc atgtgattt cagcaggtct tcttgaat taactaaaa tatgactgt ctcttcag  agaactgtc tttagtgc cagttagc aaacaacca gcccctagc gtaactatc tgcattctt gatactact gggaaatat  taataatat ccttacta ggaatgagaa gaaaaaacac ctgtcaaat ttatggaat attttgcat ttactagca ttgtgtatc</p>	A	Homo sapiens

601	190602	G Protein-Coupled Receptor GPCR150	NP_055188.1	<p>ttttactttt ggtaaacatt tccattat tgaatttcag ggaatttga ctttaagca ttaggttcac taataaacac atctgcctat</p> <p>ttactcaat tatttccttt actiatgctt tttagcata tccagtttc ctgacagcti gtaagatata ttgcctgaaat ttictaataa</p> <p>caaccaagct ttacttaag tgcataaat tattttatt cttacaga atttaattt ggatttcagt ccttgcttat gttttgggag</p> <p>accagccat ctacaaaagc ctgaaggcac agaatgctta ttctgctca ttctcttct atgtcagcat tcaagttac ttgctgcat</p> <p>ttttcaggt gatgattta tttagctt tcaaacctg ttgggaagaa gtatctact ttggtacaggc tatcaggata acttccata</p> <p>tgaatgaac tatcttat ttctttt catccact cagttact gtgagatcta aaaaaattt cttatcaag ctcatgtct</p> <p>gttttcag taccgtgta ccattgtac tactcaggt aatcattgt ttactaaag ttacagttcc agcatatatt gtagatgaata</p> <p>ttccctggt atactgttc aatgtttc tcaattgtc agtgtttg ttatattg ttaaaagac attggattac</p> <p>ctttggalcc attgtcaac tggaaagct gctcatcc acttaaat cctaactg agcaattga aaagccata tcaataatga</p> <p>ttgttaata ttataata aaagtacag ctgtcataag atcataatt tatgaacaga aagaactcag gacatataa aaaaataact</p> <p>gaactaaaac aactttgccc cccgtactga tagcatuca gaattgtct ttgaagggc tataccagt attaaatgt gttttattt</p> <p>aaaaacaaa taattccaag aagtattat agttattcag ggaacataa ttacaaat tactttgta ttacacaaa aagtgalaag</p> <p>agttacatt tggctatct galgtttgt ttactaaa aaactactgg atgcaaac'tg ttatgaaat ctgagatttc actgacaact</p> <p>ttagatata aactaaaca ttittataa atgttcaat gtaagcaaga aaaaaaaa</p> <p>MTALSSENCs FQYQLRQTNQ PLDVNYLLFL IILGKILLNLTLMRRKNT</p> <p>CQNFMEYFCI SLAFVDLLLL VNISILYFR DFVLLSIRFT KYHICLFTQI ISFTYGFLLHY</p> <p>PVFLTACIDY CLNFSKTTKL SFKCQKLFYF FTVILWISV LAYVLGDPAL</p> <p>YQSLKAQNAY SRHCFYVSI QSYWLSFFMV MILFVAFITC WEEVTTLVQA</p> <p>IRITSYMNET ILYFPSSHs SYTVRSKKIF LSKLIVCLFS TWLPFVLLQV IIVLLKVQIP</p> <p>AYIEMNIPWL YFVNSFLIAT VYWFNCHKLN LKDIGLPLDP FVNWKCCFIP</p> <p>LTPNLEQIE KPISIMIC</p>	P	Homo sapiens
602	190623	Melanopsin	AF147788	<p>ggtttccacc catcagacca cagcttcacc ccaggacacg ttgggcagca gtagtcagag gtagacatctg gagcctgagg</p> <p>cttccaccgc gggccctctg tctccattgg atggcaggct ccgggcagagc gagctgcccag gtgggtgtgg gtagcaagg</p> <p>tttggagcaa gagcgccatg gggagctcc ccagtgggac agaaagcacag gtagtgagggg gtggggccct gaggagatct</p> <p>cagtgctacc cgtcaacggct gcag'tgcacg gcccatggag aaaggacatt gtcagg'tgag acgtgggctt ocaaggccoc</p> <p>caaggctgggg gttccgagtc ctctgatct ttcc'tgaggt gctctttga gggctgtggc acc'tggg'ta t'gtggattcc cgtccatgt</p> <p>gtocacctga caagcacttc tccctggac tcc'tgtgct gctccatcac ctgcacccct tcttaathag caggttggag</p> <p>agtggggctc acattgaatg gtagctgttg ttagctcaga attgctcca gctgtgaggga atgttaaac cctacatata</p> <p>aaacgcgaagc agctggcatt gaggcttaggg acagaaagaa aagccggccc ctacgccica ccc'tgcccc aggg'tggcct</p> <p>ctgtgagcca aagccctgaa gtgggaagagc ctcaaggagga aggcag'tctg agccatgggc ttggcagctgc aggaagtaca</p> <p>gctcccgctc ccagtggggc tgcctccact tctctgctc aaacc'tgggg ctccagggaga ac'tgtt'gta aagactgggg</p> <p>gaaactctgg aagagggagtg alactctgt ccactccagg gctccaacac tcccgacact g'tccagggac atggccoccca</p> <p>cttagatga ccgc'tggccc g'tggggctcc cctaaagca g'cc'tctgtg g'cagggcttag cc'gagggcagc cctccctgga</p> <p>agccgtgtgt t'agcttccc t'ctctccag ctcc'tgctc ctctctag acaggggcaag gggcagggccc ggggtccctc</p> <p>ccacttga catccatga acttggatca gggcttgcagg cctgggtgag ttctggggac ttccccaata aggtttaaa aatcttat</p> <p>actttaaaa ttctgcgg gccag'tggc t'acggcctgt aatccctga ctttggggag cc'gaggg'tgg tggatcacct</p> <p>gaggtcaggga gttcgaggat agcc'tggcca acatgg'tgaa ctctgctc t'gtaaat t'gtaaat acaaaa'tta gccagctgtg</p> <p>gtggcag'tg cct'gtaatcc cagctactcg gggagct'gag g'cagggagat t'gcttggacc ttggagggcg aggttgcagt</p> <p>gagctgagat tgcacat'g cactcaggc ttgg'tgacag ag'caag'actg tctcaaaa aataaaaaa aaaaaataa</p> <p>actttctat caaaaaacaa gcaaaaggccg cctcgtg'atc t'gattccac ctactgtac atctctctg t'gttccatc t'gtgaaagg</p>	A	Homo sapiens

[illegible]



[illegible]

[illegible]



[illegible]

607	190701	C-C Chemokine Receptor 11	NP_057641.1	<p>tttttttggg agcatcttc aaaactiacg ttatgaagaagt ggccaagaaa tatgggtcct ggagaagaca gaagacaaagt  gggagagagt ttcttttga ttctgagggt cctacagagc caaccagtiac ttatgcat tttaaggtaaa actgctctgc ctttggctg  gatacatatg aatgatgtc tccctcaaa taaaacatct gcatattct gaaactcaaa tcaagagcg cgtgtgtgca actataata  aagaatgggt tgggggaagg gggagaataa aagccaaga agaggaaaca agataataaa tgiacaaaac atgaataa  aaatgaaca tataggaaa taattgtaac aggcataagt gaataacact ctgctgtaac gaagaagagc ttgtggga taatttga  ttgtgtgc agtgggtc atacaatct acaaagtga taatgaca cagaactata tacacacat ttaccaatc caattctctg  gtttgacat tatgataaa ttgaacat gggacaact ggggaaggg taccagagc cactgtac catcttga  acttctgt aatttaaat aatttcaaa taaaacaagt taaaaaaa cccactag tataagttag gccatcaaa acagattat  aaagaggtc atgtataaag gcaattataa ttattttaa ttactaaat ttatacaa gaaggttc cctgcataat ttatgact  gaataagtat gcagcagaac tcaactatc ttittctgt ttutttta attttaagt aatttttaa aatccaccic ctcaaaaaa  gcaataaaa aaaaacaac tataaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa  aaaaa</p>	P	Homo sapiens
608	190705	G Protein- Coupled Receptor SALPR	NM_016568	<p>MALEQNQSTD YYEENEMNG TYDYSQYELI CIKEDVREFA KVFLPVFLTI  VFVIGLAGNS MVVAYAYYK QQRKTVDYI LNLVADLLL LFTLPFWAVN  AVHGWVLGKIMCKITSAlyt LNFVSGMQFL ACISIDRYVA VTKVPSQSGV  GKPCWIIICF VWMAAILSI PQLVFTVND NARCIPIPR YLGTSMKALI QMLEICIGFV  VPFLMGVCY FITARTLMKM PNIKISRPLK VLLTVVIVFI VTQLPYNIVK FCRAIDIYS  LITSCNMskr MDIAIQVTES IALFHSLNP ILVYFMGASF KNYVMKVAKK  YGSWRRQRQS VEEFPDSEG PTEPTSTFSI</p> <p>gatttggga gtaagccag agtgcocag tgaocgggg acagggagag gggaagcttg cgtgtatcat aaggaactag  ggactccgag ctggcctga gaacocitgg acggcgagtg ctgcttacc ggctgact cctcaact gctcaaaagc  agcgcctgag ctcaactct gcttccaggg cgttcgcgc ggccaggag cccactagta cccagttcct ggctctc  ttcagtagct gtttgaag ctcocagca cgtcccgag gctagcctgg caacaaaact gggtgaaacc ggttatctt  aggctcttc cccagaaca tgaactagag gtacctgcgc algcagatgg ccgatcagc cagctagacc accatgaata  aggcagcagg cggggacaag ctacagaac tcttactct ggtcccgag cttctggagg cggccaacac gagggtgaac  ggctgcctgc agcttccgga ctgtgtgtgg gaggctgggg tggagtggc ggagggcgcg ccgccaagac atccccggg  cagcgcggg gcaagagagcg cggacacaga ggccggggcg cggatttca tgaagctgg gtagtgggt gtagcgccc  tgggttggc ggccaacctg ctggtctct acctgataa gacagcag ggctggcgca agtctctat caaccttc  gtaccaacc tggcgctgac ggacttcag ttgtgtca cccgccc ctggcggtgg gaggacgctc ttgacticaa  alggtccctc ggcaaggcca tgtgaagat cgtgtccalg gtgacgtcca tgaacalgta cggcagcggt ttctctca  ctggcatgag tgtgacgcg taccctgg tggcctcgcc tctgaagagc caccgggacc gaggacagc ccggggcgag  tgcctggccc ggagcctggg ggaacagctgc tgcctcgg ccaggcgct gtagtgggt atctgggtc ttggcgcgct  ggcctcgctg cccagtgcca ttctccac cagcgtaag gtagtggcg aggaagctgt cctgggtcgt ttccgggaca  agtgtgggg ccgcaagagg cagcttcggc tgggctctca ccacttcag aaggtgtcgt tgggtctcgt gctgcggctg  ggcatcatia tctgtgta cctgtgtc gtgcgttca tggcgagcc cggcgcgcg gggaacaaaag gaggggcgcc  ggtagcgga ggagcgccag ccggagagcag cggcgggaga ctgtgtag tcaacaaic agtgaccalc gttgtcgt  ccttctct gttgtggctg cccaacagg cgtcacac ctggagcalt cttcaagt tcaacgggt gcoctcagc  caggagtatt tctgtcca ggtatagcg ttccgttga gctgtgtct agcgactcc aacagctgcc tcaacccgt  ccttactgc ctgtgtgccc gtaggttccg caagcgctc aagagcctgc tgtgtgagcat cgtgtctct tgaatcaca  gcatggccc ctacccgc actacaag ccggagcaga ggaatcaggg ctgcagggccc cggcgcgccc ccacggcgcc</p>	A	Homo sapiens

609	190705	G Protein- Coupled Receptor SALPR	NP_057652.1	<p>ggcggagccgg accigctctat ctaccacct ggctgctgtgg tctacagccgg gggggcgctac gacctgctgc ccagcagctc tgcctactga ccagagccctc agggccacagg ccgcgcgtgc gggcaagggtg gccttcccc ggcgggtaaag aggtgtaaagg atgaaggagg gctgggg</p> <p>MQMADAATIA TMNKAAGGDK LAELFSLVPD LLEAANTSGN ASLQLPDLWW ELGLELPDGA PPGHPPGGG AESADTEARV RILISVVVWV VCALGLAGNL LVLYLMKSMQ GWRKSSINLF VTNLALTDFO FVTLTFWAV ENALDFKWPFF GKAMCKIVSM VTSNMNYASV FFLTAMSVTR YHSVASALKS HRTRGHGRGD CCGRSLGDESC CFSAKALCVW IWALAALASL PSAFSTTVK VMGEELCLVR FPDKLLGRDR QFWLGLYHSQ KVLGFLVPL GIILCYLLL VRFIADRRAA GTKGGAAVAG GRPTGASARR LSKVTKSVTI VVLSFFLCWL PNQALTTWSI LIKFNAPVFS QEYFLCQVYA FVSVCLAHNS NSCLNPVLYC LVRREFRKAL KSLLRRIASP SITSMRPFTA TTKPEHEDQG LQAPAPPHAA AEPDLLYYPF GVVYVSGGRY DLLPSSAY</p>	P	Homo sapiens
610	190711	G Protein- Coupled Receptor GPR85 (SREB2)	NM_018970	<p>ggcacagga ttctactgt gtcacagat cagatttata ctgtagagaa gatititatt ttgtttica ttaacagatt atataaagc aaaaagcatg cagaaaaaga agcagacgtt ttacatggg aattatgaa agcgtgtctg ctagtittgg gttaggaagc tgggaagtgg ttgcttaaa ttatata cctocacaa caaaactct cggaaatgg aaataaagaa aatgcatgat tctagaggca ttcctaagca ccacgtgc aggtttgg ggctgtgg taatccga ccgtttggac tggtagggc ttactggag ctcatttct ggaaagcctt acaagactga ggaatatcag actgcgaac accgggaagc gttccttgc agcacagaag caatctct coccatttc gcatattctg atggcaaac aatgggaaga aaagagggaag calgactga gatcagatca gtctcttgg tggattatat tttagtaaa algtatggat ctacttttc ctgttttta latatagat atggagctg actggagctg talccttalc ctccatcat ctatggcgaa ctatggcat gcatctgaca acatttggc aaattctgc ccttaacag cttcttgaa actgacttc ttggttica taataggagt cagcgtgggg ggcaacctc tgaatccat ttgtctagtg aaagataaaga ccttgcatag agcaccttac tacttctgt tggatcttg ctgtcagat atccicagat cgtcaattg ttccattt gtttcaact ctgtcaaaa tggctctaac tggacttaig ggactctgac ttgcaaatg atggcttgc tgggggttt gtctgttgc cacatgcti tcatgctcti ctgcatcagt gtcacagat acttagctat cggccatcac cgtcttata caaagaggct gacctttgg accgtgtctgg ctgtgacttg tatgggtggg actgtgtc tggccatggc atttcccc gtttagacg tgggacttta ctacttact agggaggaag atcaatgcac ctocacac cgtctctca gggctaatga ttcttagga ttatgtctg ttctgtct catctctca gccacacagc ttgttacct caagctgata tttttgc accgatcgaag aaaaatgaag ccagtcctagt tttagcagc agtccagccag aactggacti ttaaggctc tggagccagt ggccagggcag ctgccaatg gctagcagga ttgggaagg ggccacacc accacacttg ctggggcalca ggcaaaatgc aaacacaca ggcaagaagaa ggctatgggt cttagacgag ttcaaaatgg agaaagaat cagcagaatg ttctatataa tgaatttct gtttatacc ttgtggggcc cctacctgt ggctgttat tggagaggti ttgcaagagg gcctgttagta ccaggggggat ttctacagc tgcgtctgg atgagtting cccagtcagg aataactct ttgtctgca ttctcaaa cagggggctg aggcgctgti tcaagacaac cttctttac tgcagaaaat ccaggttacc ccaggttacc aagggaact tactgtgta tatgaggag calctgtataa tcttagcct tgtgaaaact aaacttct gctgagcaat tggggccat agccatatt tgaagaagaa ttcaaggaatg gaalcaagcag tttaaggat ttgggaaca ttctgcagc ttgcaatag ttacataa alccattt aaatctcaga gtgactctgc tgaatggcag caaagggttg taatgaaga ggagctgaac cacttcccta agtttctta tgggttcaaa aactagataa tgaaggttagc aggtgtciaag tatcaggtct aaatgtctg tatgtacta catatgaata aacatcaaaa aacaattagc attggacalc ttaataaati aggtgacat gaggtaaatg tgtgataaa aactaattt agaaatttga agactttaa acatttata ctactatgt ttgcaaga ctaaaatt ttggggactta aggtactga atccataaa gactgtgcaa tgaattatg gaalalaca cttaaaaaac cgcttgtaa gttctgggga gcaatcaaa gcaatattt ggttcaatt agagttaatt tttttgat taalacatg ctattctaa</p>	A	Homo sapiens

611	190711	G Protein- Coupled Receptor GPR85 (SREB2)	NP_061843.1	<p>ataccactt cctcatctac tagtaagatt gtagcatig aactgtatta tgggtttt gttgattgg tataaagtt ttcaatfca</p> <p>tttatattt acaaatgcta gatattggc tgggaggcaa cattaatgt acagocigt cacaactgag cagtictaat aalgcagaat</p> <p>aaatacatgt tgccttaag ggtatciag tatcticat ctattagc aciggagcaa atagccaagg gaaatcaaat cagtaactgg</p> <p>tcaigtcat gcatataaa gtcattgaa gatcattat tactttcc ttitttic acatgttg aaactaaag tgcacatcac</p> <p>tgaataaag agatttct ctacggig ctacccctc taaactgic taagaagcag gcaatgag tatgttata tttaagica</p> <p>gctgtcaagg ggaaccaca gocttagt gatccctgc acaattgg aagcattat tctatgaag gcacagictt gttatact</p> <p>tctgcacatt cagtgtattg gtaatttaa ttatcagt ttaactgt gaaagctt attatgatt ctggatttt agaaalacal</p> <p>tagatctgt gagtcatt cttaagata cagatgtgt aactcaata taagtcca ttgccaata ttaccocgt tagocgtta</p> <p>atttctga aataagttt acattttg cacatacaa cgtttttt aatttggag gcaagcaca actaggaga ciagcttial</p> <p>tatgtttg cttttgatt ctgtagcta ctatitcca gactggaaat gtaagaatg taatcaacat aatgtgata aactgacata</p> <p>atattatcg taaaagcatt attgttatt ttattaat cctcccta ttacttaa atgccagtag tattagaga tgtgtaccig</p> <p>cttagttaat tggcagaa tttaataa aacatcac tttaattgg agcatagac catagaaat tgggttcta aatataaac</p> <p>ttgtaagaag aatgtttac actaacta tgaactaac agaaaagt attatttt ttgctttt gttgtttt ttatgttg</p> <p>gttttga agttatt ttittgta ttgataat agattagga atcaatac acagaatoc atattgtat agtacttgc</p> <p>taagagaat atcaataa ataggaaa taaatcaatg aatgttca atgttaaaa aaaaaaaa aaaa</p> <p>MANYSHAADN ILQNLPLTA FLKLTSLGFI IGVSVVGNLL ISILLVKDKT</p> <p>LHRAPYYFL DLCCSDILRS AICFPFVENS VKNGSTWTYG TLTKCVIAFL</p> <p>GVLSCFHTAF MLFCISVTRY LAIAHHRFYT KRLTFWTCLA VICMVWTLV</p> <p>AMAFPPVLDV GTYSFIREED QCTFQHSR ANDSLGFMLL LALLLATQL</p> <p>VYLKLIFFVH DRKMKPVQF VAAVSQNWTF HGPGASQAA ANWLAGFGRG</p> <p>PTPTLLGIR QNANTGRRR LLVLDEFKME KRISRMFYIM TFLFLTLWGP</p> <p>YLVCYWRVF ARGPVVPGGF LTAAVWMSFA QAGINPFVCI FSNRELRRCF</p> <p>STLLYCRKS RLPREPYCVI</p>	P	Homo sapiens
612	190725	G Protein- Coupled Receptor GPR26	LG93120	<p>aggtatgg agctcttc caggtgccc atggctccc actgggggt gctgtcaag tctgtggcgt acagcaagg</p> <p>cgcacccgac ccttttgt actcttact gcgacacag tacgcacaaa gctgcaagg gattcgaac aggcctctgc</p> <p>acagacgctc caccactc tctggccta caggcactc tcacagccag aacattctgc cgggtctga g</p> <p>MNSWDAGLAG LLVGTMGVSL LSNALVLLCL LHSADIRROA PALFTLNLT</p> <p>GNLLCTVNM PLTLAGVVAR RQPADRLCR LAFLDTFLA ANSMLMAAL</p> <p>SIDRWVA VVF PLSYRAKMLR RDAALMVAYT WLHALTFPA ALALSWLGFH</p> <p>QLYASCTLCS RRPDERLFA VFTGAFHALS FLSFVVLCC TYLKVARFHC</p> <p>KRIDVITMQT LVLVLDLHPS VRERCLEEQK RRRQRATKKI STFIGTFLVC</p> <p>FAPYVITRLV ELFSTVPIGS HWGVLKSLA YSKAASDPFV YSLLRHQYRK</p> <p>SCKEILNRL HRRSIHSSGL TGDSSHQNIL PVSE</p>	A	Homo sapiens
613	190725	G Protein- Coupled Receptor GPR26	LR26	<p>atggccaaca ctaccgaga gcttgaggag gtgagcgcg cctgtccc accgtccga tcaagtatg tgaagctgtg</p> <p>actgttggga ctgattatgt gcttgagcct ggcggggaac gccatttgt cctgtctgtg gctcaaggag cgtgcccgtc</p> <p>acaaggctcc ttactact ctgttgacc tgtgcttggc cgatctggc cgtcttccg tctgtccc ctttgtcgt gctctgtgc</p> <p>gccagggtc ttactgacc ttacgtgac tcagctgcaa gatttggcc ttatggccg tgcctttg cticcatgc gcttcatgc</p> <p>tgcttgcac cagctcacc cgtacatgg ccacgcca ccaacgctc taagccaagc gcatgacat ctggacatgc</p> <p>gggctgca tctgcatgg ctggaccctg tctgtggcca tggcctccc actgttct gacgtgggga cctacaagt</p> <p>tattcggag gaggaccagt gcatcttga gcatgciac tcaaggcca atgacagct gggcttcatg ctatgtgg ctgtctcat</p>	P	Homo sapiens
614	190741	Sreb3	NM_018969		A	Homo sapiens

615	190741	Sreb3	NP_061842.1	P	Homo sapiens
<p>ggcagctacc catgctgct acggcaagct gctctcttc gaggatcgt accgcaagat gaaagcagtg cagatgggtg  cagccalcag ccagaacttg acattcattg gtccggggc caccggcag gctgctgcca actggatgc cggcttgcc  cgtggggcca tgcaccaac cctgctgggt atccggcaga atgggcatgc agccagccgg cggctacttg gcatggacga  ggcaagggt gaaagcagc tgggocgcat gtctacgc atcacactg tcttctgt cctctgttga cctacatcg  tggcctgcta ctggcgagtg ttgtgaag cctgtgctgt gcccaccgc taactggcca ctgctgttg gatgagcttc  gcccaggctg ccgtcaacc aattgtctgc ttctgtctca acaaggacct caagaagtg ctgaggactc agcggccctg  ctggggcaca ggagggtccc cggctccag agaaccctac tggctatg ga  MANNTGEPEE VSGALSPSA SAYVKLVLLG LMCVSLAGN AILSLVLKE  RALHKAPYYF LLDLCLADGI RSAVCFPVL ASVRHGSSWT FSALSKIVA  FMAVLFCFHA AFMLFCISVT RYMAIAHHRF YAKRMTLWTC AAVICMAWT  SVAMAFPPVF DVGTYKFIRE EDQCIFEHRY FKANDTLGFM LMLAVLMAAT  HAVYGKLLF EYHRKMKPV QMVPASQNW TFHGPATGQ AAANWAGFG  RGPMPPTLLG IRQNGHAASR RLLGMDEVKG EKQLGRMFYA ITLLFLLWS  PYIVACYWRV FVKACAVPHR YLATAVWMSF AQAAVNPVC FLNKLKDKC  LRTHAPCWGT GGAPAPREPY CVM</p>					
616	190742	G Protein-Coupled Receptor H7TBA62	E32367	A	Unidentified
<p>ggactctg cacagctag agcaggaaag gggggaaagg cggcgataga ggttagcagg aatgttaat taicaggagc  aggaacaga ctgagggtat gcccaggctc acacaggccc tcataggccc aggttccca gtgggggaga aacagggaagc  tgtgacttcc tctctt cctctctg tcttagctc aaggctacgt ctgtgagat gaattccaac ctgttttgg tggcactgt  ccctgggcat ggtaalagcc tctagtaacc ctctggccac aaacaccca aactctct tgaataaat attacataa attgctatt  cacatgtatt ctctattg atcatgcc tctctgaag cagacthacc tgaataatt aagcaagaaa acaggcttag  gggagtaag taactctcc agtcacacgg ctatgtgagca gcaaggcttgg gactccgag cctccgctct tctctctt  ggacacocat gctgattccc tgcctatg ccacttcca ggcctctgg ttggggccc aaggggaaacac tttttgaga  ggaggggagg cctgacactg ttgggaacag aggcagctct agtttgctc ctgtcatc tgggacaggg aaacctccag  ctctctctt ggggtggagg ctggggctg cctccatag cggggtaact ctctcttc cctctctt ctgccaatta gaggccctct  tacaggcggg cgcagtcaca tatacctgg catcaggct gtgctcggc ctgcccacc tacaccaat ctgaccaac  aggaagggtg tgggtgttcc ttccacacc cctccctctg aggtgtgggc gttggcagag gctcacaga gggcccagag  aagcacttaa ttctacagcc tcttcttag agcctcagt ggcctctgcc agtctggcag acactggag acctcttc tcaagcac  caatctga tgcctcga tgcacacat caatctct gctctccac ccacttct ctggggccaat gctccggag  gcagtgtgct ggtgtctgat gattctcga tgccttcaa attccatgccc ctgaggctca tgggtgccc ggcctatggg  ctgtgggggg ccattggctt gctggggaat ttggcggtg tgggttact ggttaactgt gcccgggag cccctggccc  accttcagac acctgtct tcaactggc tctggcgag ctgggacttg cactactct cctcttttg gcaaggcaggt  cggcacttga ctacactg ccttcgggag gtgccccttg caagatgggt ctgacggcca ctgctctca cgtctatgccc  agcacttcc tcaacagc gctgagctt gctgctact ggggtgggc calgtctgccc gggcagagcca cccactctc  actcttgg gcccgaatag ccacctggc agtgtgggc ggccttgcac tgggtgacgggt gcccacagct gctctgggg  tggagggtga ggtgtgtgt gtcgctctt ggcctgctg ttcccagc aggtactgag tgggggctta ccagctgcaag  agggtgtgtg tggcttcat ggtgcccctg ggcgtcatca ccacacagca cctgtgctg ctggcctcc tgcagcgggc  gcaacggcgg cggcagggaca gcaagggtct ggcggctct gtccgcatcc tgggtgctc ctctcttc tgcgtgttc  ccaacctgt ggtcacttc tgggtgttcc tgggtgagtt gaccgtgtg ccttgggaca gtacttcta tactatcag acgtatgtct  tccctgtcac tactgttg gacacagca alagctgccc caacctgtg ctgtactgtc tcttggggc ggaaggccccg  caggctcttg caggacatt caggatctg cggcggagc tgggtggcca gggcgaggc tgggtgcaac aggtggccct</p>					



617	190742	G Protein- Coupled Receptor H7TBA62	ENSP00000201 359	<p> aaagcagagta ggcagggcggg gggcgcgaag caaccccccgg ggaagccggc ctttaccct gctaccaac ctggacagag  ggacacccgg gtaaggggcg caagctgaac acactctct tctgagac caccagagt aggatccttg agtccctgggg  agaagctgcc ctctcgcca ggcctgcagtg cctcagggga aaaaagctcga tcttgatcc ccaactcgg gctgggagaa  tggggggggg gggggctcag alcagagctg gattgagcaa agcttaagc ttatttggga gattgggaaag agagggatct  ggagaataac ctctggatta tccacaatt gcttgacct ttatccag ttacaccc agttacagat gggaacaaaag gattcgttg  tcaattcgg ctttcgcaag aataccctagg aaactccc taagggtct agggtaalga atcagaggtc agtgcacalc tctctcga  ccacccccc acctaaaac aggggtatccc ttgctttct ccgggtacaa ggcacaaaat gcaagcttcc cctgtccca  ccttaacalc tcaagggtga cactgaac ttgctgcttg gaggggctc agtgcacaaa gcttgatgct ccttgaagggg  atgcacagtg tggggatttg ctggaaattc cagcacctgc caggcccttg gttgaacacc ctggctcga cgggagtgcc  tgctgtct ccttaaac aggatttga agaaagtgaa ataatgacaa gtaaaagca tggggggggg gaaagggggg  gagcgtataa agaggggggg gggctggggg aacaggctgc aggttagagcc agaaaagcag agactccaga aagtggtgct  agtcttccct gcccacaaag caaagccag agtatcaatt tgaagctcag agcaccttga ttacagctt taccctcag aaattactt  acctttgt acctactgt tctcaactgt aaaaaggct actaaagatt taacagtgaa atalactgt agctattt ctgtttgt  tggttttg ttgagagag agtctgtc tgcggccag gctggagtg cgtgggtg tctcagctca ctgcaacct cgtctccgg  gttcaagcga ttctctgoc tcaagctccc gaggtagctgg gactacagg tcccgctacc atgctggcc aattttgt aattttaa  agaagacag ttacacata ttggccaggc tggctcaaa ctctgacct ctatgactt gcccacctg gctcccaaa  gtcttgagat tacaggcgtg agccacccga cccggctgag ctatttct tacacctgt gtaaaatgga gacagagaga  tgggagagaaa taagcgtgca gctggggagat ggggaggggg aacacgtct cagctggaaat ggttgatatt gctctgaagt  ggggataat gaaagctca cataaagac tcagaggttg gcccctaaag cctcttga ggtgtgtct cagggacag  ggtctctt tggttctgt atgagatgc atcaatgala aaggttagoc atcagaagg tttctaggga ggcagccct  agaaaggagg gaggcagagg gaagtaggg tagagctc </p>	P	Homo sapiens
618	190743	G Protein- Coupled Receptor GPCR5D	NM_018654	<p> atgtacagg actgacaga gtacactgga gacttttc tctctgga cggcagaggg ccatggggca tcaattcga  gtccctggcc atacttgca tgggtgac aattctga ctctagcat ttcttct cagtcgaaag atcaagact gcaagccagtg  gaatgtctc ccacccagc tctctctc cctgagtg cggggctct tgggactgc ttggcttc atcagagc tcaatcaaca  aatggccccc gtacgtact ttcttggg ggttcttt gctctgt ttcaagct cttagctat gctccaatc tagtgaagt  gggtcgggg ttgtctct tctctggac gacattctg tgcattgca ttgttgagcag tctgtgcaa atcatttg ccaatgata  tgtgacttc atcatgacca gaggatgat gtttgaat atgacacct ggaagctcaa tgggtactt gttgactcc tgggtatgt  cctctcttg atggccctca catctgt ctcaaaagc acctcttg gcccgttgga gaactggag cagcagagaa  ggctcatct tatcactg ctcttoca tcaatcgg ggggtgtg atctcagc tctgagagg caacccgag ttccagcgac  agcccccgg ggaagacccg gtctctgca ttgcttgg taccacagc tgggtttcc tgcctgta catgctcct  gagcttga ttcttacc atcggtgaga caggagtgcc ctttaaggc caatggcgg cccgtcacag cctaccaaca  cagcttccaa ggggagacc agggctctc cagagccga gacagtgat gacttgagga ggaatgagca ttaactcat  atggactcc catcagcc gacagtgt atccacaca agaggtttc atccacag ctaactaag cccccagcaa </p>	A	Homo sapiens

619	190743	G Protein- Coupled Receptor GPCR5D	NP_061124.1	gatcaggag gaggataaa MYKDCIESTG DYFLLCDAEG PWGIIIESLA ILGIVVTILL LLAFLFLMRK IQDCSQWNVL PTQLLFLLSV LGLFGLAF AF IELNQQTAP VRYFLFGVLF ALCFSCLLAH ASNLVKLV RG CVSFSWTTL CIAIGCSLLQ IIAATEYVTL IMTRGMMFVN MTPCQLNVDF VLLVYVFLF MALTFVSKA TFCGPCENWK QHGRLLFITV LFSIIIWVW ISMLLRGNPQ FORQPWDDP VVCIALVTNA WVFLLLYIVP ELCILYRSCR QECPLQGNAC PVTAYQHSHFQ VENQELSRAR DSDGAEEDVA LTSYGTPIQP QTVDPTQECF IPQAKLSPOQ DAGGV cggcgagggtg ggggaacctc ctagagatg ccttggtcac agcaacctt aagacagcca tggccatgg ggaaccaacc agagcctggc ctggagacca ggaaggccat ccacaagcc ttgggtatgt gcttggggact gctctcttc cgttccacg gggcttgggc ccaggggccat gtccacccg gctgagcca aggcctcaac cccctgtact acaaccttg tgaacctct ggggcgtggg gcaatgtcct ggagggcgtg gctggggcgg gcatgtcac cagttgtg ctacacatca tcttgggtgg cagcctccc ttgtgcagg acaccaagaa acggagcctg ctggggaccc aggtatctt ccttgggg acctgggc tctctgct cgtgttggc tgtgtgtga agcccgact ctccactgt gctctggc gcttctt tgggggttg ttgccatct gcttcttg tctggcggct caggtcttg cctcaacti cctggccgg ggaacacacg gggccgggg ctgggtgac ttactgtg ctctctgt gaccttgta gaggatca tcaatagaa gtggctgac atcaccctgg ttggggcag tggcgagggc gggccacag gcaacagcag cgcaggctgg ggcgtggg cccctgtgc cgtcgccaac atggacttg tcaaggcact catctatgc atgtgtgtg tctgggtg ctccgggg gcttgggg ccttgggtgg ccgtacaag cgttggcgta agcatgggt cttgtgtc ctaccacag ccacctcgt tgcataagg gtgtgttg tgcatagt tacttggc aacaagcgc acaacgtcc cacttgggt gacccacgc tggccatgc cctgcgcgc aatgcttgg ccttctct ctctatgc atcccgagg tctccagg gaccagtc agccagagc aaagctacca gggggagatg taaccaccc gggcggtgg ctatgagac atctgaaag agcagaagg tcaagagcatg ttgttgaga acaaggcct ttccatgat gagccgttg cagctaaag gccgggtg ccatagagc ggtacatgg gcatgtgt accagtgt accagccac tgaatggc ctagtgaca aagtgtgc cgaagggt ttagacatca tctccacg gggcaccg aacaggccagg tgaatggcag tgcacactg accgtggg ctgaagacat gtactggc cagagccac agggcgccac accgcgaaa gacggcaaga actctcagg cttagaagc cctactgt ggggactg cagcgtggc gaggagagg gggcgggtt ggggaggcc ctgaggact gggccgggc aaggactct ccaggctct cctccctg gaggccagc aactgtgc ccagatcgg aaggccctc ctcttgcca gtgttgggt ggggtgtg ggtgtccca cccactctc agtgtgtg ggtcagga gcaacccca gctctggc aggatcact cggcggtcac actccagcca aalagtgtc tgggggtgt ggttggcag cgcctatgt tcttgaga ttctgcaac ctcaaggac ttccaggcg ctaggccg gactgtc ctctgtgg aacaagggt cctaataat acatttgc ttataaaa aaaaaaaa aaaa MGTPPEPLG ARMAIHKALV MCLGLPLFL PGAWAQGHVP PGCSQGLNPL YYNLCDRSGA WGIVLEAVAG AGVITFVLT IILVASLPFV QDTKKRSLG TVQFFLLGTL GLFCLVFACV VKPDFSTCAS RRFLFGVLF AICFSLAAHV FALNFLARKN HGPRGWVIFT VALLTLVEV INTEWLIIT LVRSGEGGP QGNSSAGWAV ASPCA VANMD FMALIVML LLLGFLGAW PALCGRYKRW RKHGVFLLT TATSAIVWV WIVMYTYGNK QHNSPTWDDP TLAIALAANA WAFVLFYVIP EVSQVTKSSP EQSYQDMYP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLTS VYQTEMALM HKVPSEGA YD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VWD	P	Homo sapiens
620	190744	G Protein- Coupled Receptor GPCR5C	NM_018653	cggcgagggtg ggggaacctc ctagagatg ccttggtcac agcaacctt aagacagcca tggccatgg ggaaccaacc agagcctggc ctggagacca ggaaggccat ccacaagcc ttgggtatgt gcttggggact gctctcttc cgttccacg gggcttgggc ccaggggccat gtccacccg gctgagcca aggcctcaac cccctgtact acaaccttg tgaacctct ggggcgtggg gcaatgtcct ggagggcgtg gctggggcgg gcatgtcac cagttgtg ctacacatca tcttgggtgg cagcctccc ttgtgcagg acaccaagaa acggagcctg ctggggaccc aggtatctt ccttgggg acctgggc tctctgct cgtgttggc tgtgtgtga agcccgact ctccactgt gctctggc gcttctt tgggggttg ttgccatct gcttcttg tctggcggct caggtcttg cctcaacti cctggccgg ggaacacacg gggccgggg ctgggtgac ttactgtg ctctctgt gaccttgta gaggatca tcaatagaa gtggctgac atcaccctgg ttggggcag tggcgagggc gggccacag gcaacagcag cgcaggctgg ggcgtggg cccctgtgc cgtcgccaac atggacttg tcaaggcact catctatgc atgtgtgtg tctgggtg ctccgggg gcttgggg ccttgggtgg ccgtacaag cgttggcgta agcatgggt cttgtgtc ctaccacag ccacctcgt tgcataagg gtgtgttg tgcatagt tacttggc aacaagcgc acaacgtcc cacttgggt gacccacgc tggccatgc cctgcgcgc aatgcttgg ccttctct ctctatgc atcccgagg tctccagg gaccagtc agccagagc aaagctacca gggggagatg taaccaccc gggcggtgg ctatgagac atctgaaag agcagaagg tcaagagcatg ttgttgaga acaaggcct ttccatgat gagccgttg cagctaaag gccgggtg ccatagagc ggtacatgg gcatgtgt accagtgt accagccac tgaatggc ctagtgaca aagtgtgc cgaagggt ttagacatca tctccacg gggcaccg aacaggccagg tgaatggcag tgcacactg accgtggg ctgaagacat gtactggc cagagccac agggcgccac accgcgaaa gacggcaaga actctcagg cttagaagc cctactgt ggggactg cagcgtggc gaggagagg gggcgggtt ggggaggcc ctgaggact gggccgggc aaggactct ccaggctct cctccctg gaggccagc aactgtgc ccagatcgg aaggccctc ctcttgcca gtgttgggt ggggtgtg ggtgtccca cccactctc agtgtgtg ggtcagga gcaacccca gctctggc aggatcact cggcggtcac actccagcca aalagtgtc tgggggtgt ggttggcag cgcctatgt tcttgaga ttctgcaac ctcaaggac ttccaggcg ctaggccg gactgtc ctctgtgg aacaagggt cctaataat acatttgc ttataaaa aaaaaaaa aaaa MGTPPEPLG ARMAIHKALV MCLGLPLFL PGAWAQGHVP PGCSQGLNPL YYNLCDRSGA WGIVLEAVAG AGVITFVLT IILVASLPFV QDTKKRSLG TVQFFLLGTL GLFCLVFACV VKPDFSTCAS RRFLFGVLF AICFSLAAHV FALNFLARKN HGPRGWVIFT VALLTLVEV INTEWLIIT LVRSGEGGP QGNSSAGWAV ASPCA VANMD FMALIVML LLLGFLGAW PALCGRYKRW RKHGVFLLT TATSAIVWV WIVMYTYGNK QHNSPTWDDP TLAIALAANA WAFVLFYVIP EVSQVTKSSP EQSYQDMYP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLTS VYQTEMALM HKVPSEGA YD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VWD	A	Homo sapiens
621	190744	G Protein- Coupled Receptor GPCR5C	NP_061123.2	cggcgagggtg ggggaacctc ctagagatg ccttggtcac agcaacctt aagacagcca tggccatgg ggaaccaacc agagcctggc ctggagacca ggaaggccat ccacaagcc ttgggtatgt gcttggggact gctctcttc cgttccacg gggcttgggc ccaggggccat gtccacccg gctgagcca aggcctcaac cccctgtact acaaccttg tgaacctct ggggcgtggg gcaatgtcct ggagggcgtg gctggggcgg gcatgtcac cagttgtg ctacacatca tcttgggtgg cagcctccc ttgtgcagg acaccaagaa acggagcctg ctggggaccc aggtatctt ccttgggg acctgggc tctctgct cgtgttggc tgtgtgtga agcccgact ctccactgt gctctggc gcttctt tgggggttg ttgccatct gcttcttg tctggcggct caggtcttg cctcaacti cctggccgg ggaacacacg gggccgggg ctgggtgac ttactgtg ctctctgt gaccttgta gaggatca tcaatagaa gtggctgac atcaccctgg ttggggcag tggcgagggc gggccacag gcaacagcag cgcaggctgg ggcgtggg cccctgtgc cgtcgccaac atggacttg tcaaggcact catctatgc atgtgtgtg tctgggtg ctccgggg gcttgggg ccttgggtgg ccgtacaag cgttggcgta agcatgggt cttgtgtc ctaccacag ccacctcgt tgcataagg gtgtgttg tgcatagt tacttggc aacaagcgc acaacgtcc cacttgggt gacccacgc tggccatgc cctgcgcgc aatgcttgg ccttctct ctctatgc atcccgagg tctccagg gaccagtc agccagagc aaagctacca gggggagatg taaccaccc gggcggtgg ctatgagac atctgaaag agcagaagg tcaagagcatg ttgttgaga acaaggcct ttccatgat gagccgttg cagctaaag gccgggtg ccatagagc ggtacatgg gcatgtgt accagtgt accagccac tgaatggc ctagtgaca aagtgtgc cgaagggt ttagacatca tctccacg gggcaccg aacaggccagg tgaatggcag tgcacactg accgtggg ctgaagacat gtactggc cagagccac agggcgccac accgcgaaa gacggcaaga actctcagg cttagaagc cctactgt ggggactg cagcgtggc gaggagagg gggcgggtt ggggaggcc ctgaggact gggccgggc aaggactct ccaggctct cctccctg gaggccagc aactgtgc ccagatcgg aaggccctc ctcttgcca gtgttgggt ggggtgtg ggtgtccca cccactctc agtgtgtg ggtcagga gcaacccca gctctggc aggatcact cggcggtcac actccagcca aalagtgtc tgggggtgt ggttggcag cgcctatgt tcttgaga ttctgcaac ctcaaggac ttccaggcg ctaggccg gactgtc ctctgtgg aacaagggt cctaataat acatttgc ttataaaa aaaaaaaa aaaa MGTPPEPLG ARMAIHKALV MCLGLPLFL PGAWAQGHVP PGCSQGLNPL YYNLCDRSGA WGIVLEAVAG AGVITFVLT IILVASLPFV QDTKKRSLG TVQFFLLGTL GLFCLVFACV VKPDFSTCAS RRFLFGVLF AICFSLAAHV FALNFLARKN HGPRGWVIFT VALLTLVEV INTEWLIIT LVRSGEGGP QGNSSAGWAV ASPCA VANMD FMALIVML LLLGFLGAW PALCGRYKRW RKHGVFLLT TATSAIVWV WIVMYTYGNK QHNSPTWDDP TLAIALAANA WAFVLFYVIP EVSQVTKSSP EQSYQDMYP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLTS VYQTEMALM HKVPSEGA YD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VWD	P	Homo sapiens

622	190745	G Protein- Coupled Receptor LGR7	NM_021634	<p>atgacatcgt gtctctct ctctacatc ttaatttg gaaataatt tctcatggg ggtggacagg atgtcaagtg ctccctggc tattccctt ggggaacat cacaagtc tgcctcag tctgtcagtg taacgggtg gacagctcg ggaatcaggc cgatggagac aactggggag acaacaatgg alggtccatg caattggca aataattgc cagtactac aaaaagact ccaataatc tttagggca gaaacacctg aatgtttgtt cggctctgtg ccagtgcctat gcttttgcca aggtctggag cttagctgtg atgaaacca ttacagagt gttccatcg ttctcaaa tggacatgca atgtcacctc agtggaaact aalaagaaa ctccctctg atgttcaaa gaattatcat gacttcaga agctgtacct gcaaaacat aagattacat caatccat ctatctt agaggactga atagccttac taaactgat ctacgata acagaataac ctctctgaag ccgggtgttt ttgaagatc tcaagacta gaalgctga taattgaaga taatcaccic agtgcgaatt cccaccaac atttatgga ctatatttc ttattctt agtccctgag aataacgtcc tcaccgttt acctgataaa cctctgic aacacatgcc aagactacat tggctggacc ttgaaggcaa ccaatccat aatttaagaa atttgactt tatttcctg agtaattaa ctgtttagt gtagaggaaa acaaaatta atcactaaa tgaataact ttgcacctc tccagaaact ggaatgaatt gatttaggaa gtaataagat tgaataatct ccaccgtta tatcaaggga cctgaaggag ctgtcacaat tgaatcttc ctataatcca atocagaaaa ttcaagcaaa ccaattgat tatctgca aactcaagtc tctcagocia gaagggaattg aaatttcaaa tatcaacaa aggatgttta gacctctat gactctct cacatatatt taagaatai ccagtactgt ggggtatgcac cacatgttcg cagctgtaaa ccaaacactg atggaaatt atcttagag aatctctgg caagcatat tcaagagatg ttgtctggg ttgtatctgc agtaccctg ttggaaaca ttitticat ttgcagcga cctatataca ggtctgggaa caagctgtat gccatgtcaa tcatttct ctgctgtgccc gactgttaa tgggaatata ttatctgt atcgagggtc ttgacctaaa gtttctggga gaatacaata agcatgcgca gctgtggatg gtagtact atgtcagct ttaggtatc ttggccatc tgcacaga agtatcagt ttactgttaa catttctgac atgggaaaaa tacatgca ttgtatcc tttagatgt gtagagacct gaaatgacag aacaattaca gtctgtatc tcattggat tactgtgttt atagtggcti tcatccatt gagcaalaag gaattttca aaactacta tggccaacat ggagatgct tcccttca ttcaagat acagaagta ttggagocca gattttica tggcaatt ttcttgat taattggoc gcattttca tcatgttt ttctatgga agcatgttt atagtgtca tcaagctgc atacagcaa ctgaataacg gaataagtt aaaaaagaga tgaatctgc caacgttt ttcttatg tatattaga tgcattatgc ttgatalocca ttitttagt gaaatttct tcatcttc aggtagaat accaggtaac ataacctt gggttagtat ttattctg cccataaca ggtttgaa ccaattctc tatactga ccacaagac atttaagaa atgattac atgtttgta taactacaga caaagaaaat ctatggacag caaaggctag aaaacataig ctccatcat catctgggtg gaaatggc cactgacga gtagccact gagttaatga agcgggaact ttcacatag cctgtgaaa tgtcactgt ttcaatca acgagacta attcattc atga</p>	A	Homo sapiens
623	190745	G Protein- Coupled Receptor LGR7	NP_067647.1	<p>MTSGSVFFYI LFGKYFSG GGDVVKCSLG YFPCGNITKC LPQLHCVG DDCGNQADED NCGDNNGWSM QFDKYFASY KMTSQYPFEA ETPECLVGSV PVQCLCQGLE LDCDETNLRA VPSVSSNVT MSLQWNLRK LPPDCFKNYH DLQKLYLQNN KITSISYAF RGLNSLTLY LSHNRITFLK PGVFEDLHRL EWLIEDNHL SRSPPTFYG LNSLILLVLM NNVLTRLDPK PLCQHMPLRH WLDLEGNHH NLRNLTFISC SNLTVLVMRK NKINHLNENT FAPLQKLDEL DLGSNKIENL PPLIFKDLKE LSQNLNLYN IQKIQAQFED YLVLKLSL EGEISNIQO RMFRPLMNL HIYFKKFQYC GYAPHVRSC PNTDGISSLE NLLASIQRV FVWVVSATC FGNIFVICMR PYRSENKLY AMSISLCCA DCLMGYLFV IGGFDLKFGR EYNKHAQLWM ESTHCQLVGS LAILSTEVSV LLLTFLLEK YICIVYFRC VRPGKCRIT VLLIWTGF IVAFIPLSNK EFFKNYYGTN GVCFLHSED TESIGAQIYS VAIFLGINLA AFIIIVFSYG SMFYSVHQSA ITATEIRNQV KEMILAKRF FFIVFTDALC WPIFVVKFL SLQVEIPGT ITSWWWVIFIL PINSALNPIL YTLTRPFKE MIHRFWYNYR QRKSMDSKGQ KTYAPSIWV EMWPLQEMPP ELMKPDLFY PCMSLISQS TRLSYS</p>	P	Homo sapiens

624	190748	GPCR Ls190748	AX147756	A	Homo sapiens	gtctgggggt gggggaagct ggggacagggg tcaatggct gaagcaagtg ctctcalccc cctagctctct gctgatctag ttggggctcc agagtggggg gggagaaaggc actttgaac ttctgtccc ttacgtctt agccatcaaa ctctgagctg ggaatagtg cgaatgaca ggaactttcc ctgggctct ctggggccaca attctggccc gaggagaaag gggaggaatga ggtgagcacc ttctcact ctggggccat ggggtagagc tgcagtcgca cctcttctg ccaataggca tagatgagtg ggtgagcag ggaatggccc agcccgagca gccacaggta ccgttcagc actagggtaga ggtgacactc ctggcaggcc accgtgcaaa tgcagtgat aaggaaaggg gtccaggata gagcaaatg cccaatgaga acagacacag tacggagagc ttggaagtc ctgggagtc gtgggagtcg ataactcca gccatgctc ctgcalgtc catcttctga atctgtggc ttgtcaltga ggaatcttg agcatgtgc agtagaagaa gacaaaggag agcatggctg ggaaggaagg aacgcagggag agggtcagca ggaatgaggg gtagaalaca gcaaaaggc tgcactggccc ttgttaggca gtctgtggga acatggggat tocggatggg aggaagccaa tgaaggtaaga cactaacac agcccggcaa tgcaggcccc ggccacgaac ccactatga tcttcaagta gcggaaaggc tctgtatgg caaggtaact gtcaagggtg atcagatga ccgtgagagc agaggcagct ggggaggaag tgaacaatgc calccgagc ctgcacagg tcttctgtgt gggccgagaa gggctgggga gctgtgtgt ggttaggcca ggtatggcca caccataa ggtgtcagcc acagccagat tcaaggtaga gcaagagactg acacatcat tctgttgat caacagcagc acagccacag ccactagtgt gtagtagca atgataggg agggccaggac agcaaggatc actccaaag agaaagatga ttcatgtct gaaagtggca ggaacttact taccaggcca tg
625	190748	GPCR Ls190748	CAC39548.1	P	Homo sapiens	MESSFSFGVI LAVLASLIA TNLVAVAVL LLIHKNDGVS LCFTLNLA VA DTLIGVAISG LLTDQLSSPS RPTQKTLCSL RMAFVTSSAA ASVLTVMILT FDRYLAIKQP FRYLKIMSGF VAGACIAGLW LVSYLIGFLP LGIPMFQQT YKQCQSFV AV FHPFVLTLS CVGFFPAMLL FVFYCDMLK IASMHSQQIR KMEHAGAMAG GYRSPRTPSD FKALRTVSVL IGSFALSWTP FLITGIVQVA CQECHLYLV ERYLWLLGVG NSLLNPLYA YWQKEVRLQL YHMALGVKKV LTSFLFLSA RNCGP RPRES SSCHIVTSS SEFDG
626	190749	G Protein-Coupled Receptor GPR62	AF317653	A	Homo sapiens	atggccaact ccacaggct gaagccca gaagtgcag gctgtgtggg gttgatccg gcagctgtcg tggagggtggg ggcactgtcg ggcacaggcg cgtgtgtgtg cgtgtgtcg cgcagccgg gactgcgga cgcgtctac ctggcgcaac ttgtgtgtgt ggaactgtcg gcggccgct ccactatg ccactatg cgtgggctcg cggccggcac cggccggcg cgtggcgccg gtgcgttgg gcccgccg atgcggcc gctgtgtcc tctcgccg cgtgtgtcg gctgtcacgc tgggggtggc cgcacttggc ctggcagct accgctcat cgtgcacccg ctggggcag gctgtggccg gccgctgtgt ctgtgtctca ccgcgtgtg ggcggcgcg ggaactgttg gcgcgtctc cgtgtcgcc cgcggcccg caccggcccc tgcctgtct cgtgtctcg tctgtgtg gggcctcgcc ccttccggc cgtctgggc cctgtggc ttgcgtgtcg ccggccctc gctgtcgcc gccacggcg gcatctgt ggtgtgtgt cgcgtgtcc tgaaggcccc acggccggcg cgcgggtccc gacttcgtc ggaactctg galagccgc ttcatctt gccgcgtc cggcctcgcc tgcggggggg caaggcgcc cggcccccag cgtgtggccgt gggccaatt gcaagctgt ggtgtgtta tggctgtcg tgcctgtcg ccgacggcg ggcggcgga gccgaagcg cgtgtacct ggtgtctac tgggtcttg cgtgtcaccc ctctgttac gggctgtc agcggccgt ggccttggca ctggcccgcc tcttccgg tgcactgtc tgcactgtc gggctgtcac tccgcaagcc tggcacccg ggcactct gcaatgctc cagaagcccc cagaaggccc tgcgttagg cctctgtagg ctccagaaca gaccccgag tggcagag ggcggagccc cgaataccag gggccacttg agagtct cctctga
627	190749	G Protein-Coupled Receptor GPR62	AAK12638.1	P	Homo sapiens	MANSTGLNAS EVAGSLGLL AAVVEVGALL GNGALLVVVL RTPGLRDALY LAHLCVVDLL AAASIMPLGL LAAPPGLGR VRLGPAPCRA ARFLSAALLP ACTLGVAAALG LARYRLVHP LRPGRPPPV LVLTAVWAA GLLGALSLLG PPPAPPPAPA RCSVLAGGLG PFRPLWALLA FALPALLLLG AYGGFVVAR

628	190774	Histamine H4 Receptor	NM_021624	<p> RAALRPPRPA RGSRLRSDSL DSRLSILPPL RPRLPGGKAA LAPALAVGQF  AACWLPYGCA CLAPAARAAE AEA AVTWVAY SAFAAHPLY GLLQRPVRLA  LGRLSRRALP GPVRACTPQA WHPRALLQCL QRPPEGPAVG PSEAPEQTPE  LAGGRSPAYQ GPPESSLS  ggaagactac acatttagg tatggatta gaaacalac tggcagaat tgcctggctg gattaattg claatngac ctctcatic  atttgatgg atgcagata claatagcac aatacaatta tcaataagca ctcggtgac tttagcatt ttatgtct tagtagctt  tgcataaag ctaggaaatg ctttggtcat tttagcttt g'gg'ggaca aaaaacttag acatgpaagt agtatatt ttctaact  ggocalcit gactcttg tgggtggat ctccattct ttgtacacc ctacacgct gttcgaaagg gatttggaa aggaatctg  tgaatttg ctactactg actalcitg atgtacagca tctgtatata acattgctat calcagctat galcgalacc tgcagctc  aaatgctg tctatagaa ctcaacatc tgggtgctg agatgtgta ctctgattg ggcgttggtg gtcctggctt tctatggaa  tgggccaatg attcagtt cagagctg gagggaagaa ggtatggaaat g'gaaaccgg atttttgg gaaatggta tcttgccat  cacalcac tgggaatgg tgaaccag calctagc gcttatua acatgaatat ttatggagc ctggggaagc g'galtcat  cagtagggc caagaccac ctggactgac tgcctgctt tocaacat g'ggacacac attcagagg agactatct  caaggagac tcttc'gca tgcagagag ttctgcatc ctctacica g'gagagaga g'gagaaagag tagtctcag ttctcica  gaaacaaat g'atagcaat acaatgctt ocaaaatgg ttctctcc caatcagat ctgtagctt tocaaaaag gaaatggtg  aactgcttag agocaggaga tttagcaagt cactggccat tcttaggg gttttc'g ttgctgggc tcaatct ctgtcaca  ttgctctt attatct tcaagcaag g'ctaaatc agtttggtat agaatgcat ttggctca g'gggtcaat tcttgctca  attctttt g'atoccatg tgcacaagc gctttcaaaa ggtttctg aaaaattt g'ataaaaa gcaacctcta ccaacaac  acagtggtg agtatctt taaagacaat ttctacct ctgtaaatt tagtctcaat ctacctaaa tgaatcaggt ctggcttta  tctggccct ttactctac caacagatct g'catttggaa g'caatggta aattctcca g'gaaataa g'cagataat atgactgat  aatatttg taaacttga g'cataatg tactatc ttctagct tcaactct ctgcttt agacttaat ttalgtc'ga  ttacaaaat ccagtttgt ttcttcta tgttccatg alaatagct ctatagg'aa ttctcttt taaatttat cgtatagaa  actatccag ttgaaatc attccataa g'catgcaata g'gaaagaa cctctggct g'gagctggcc aactcgtc  tgaatcagttg g'gggtgag ttgggttga g'gggcaaga g'caggggaagc g'gcatggcc caggtgagct cctgtg'g  tocaatatt atattctaa tccagtaag g'aaagaaagc tagtgg'g g'agggagag ctgtgactg cagttctca  aggttctcag tgaattat ttggggcc tgggtgctac aggtatcagaa g'gcaaggat aggtcag'ggt cacaatgg  tgaagatg gctgtcca ttctctg ttctttt ctgcttcca calcagctc ctgtt'gag aacataaga agaaagagc  taagatgg tgaatgact g'catgataa actatagaa cctggatc agtctc'ga ctatagatg tcaataata ttatttaa  aaatttat ttgtggcc g'gcatgg'g ctacggctg aatccagc acttgg'g g'ccaagg'g g'ggatcag  aggtcagag atcgaagcca tctggcca catgg'gaaa cccatctg actaaatc aaacaatag ctgggtg'g  cggcgcatg ctgtgtcc agtactgg g'aggtgagc caggggaaat gcttgaacc g'gagggc'g gtttggcag  cttggcaaca g'gcaagact ctgtataa agaaaaaaa attttt'g ttgagagc acttggctt g'ctccag ctggagc'ga  g'aaatgcaat calagctac tgcagctgg aactctgg ctcaagcaat cctggctt tggctcca agtatggg  actacagga ctggcca cactggata ataaaaat tatctgta g'gagatgagt ctactg'g tggccagct g'gggtcaat  aatatttt taaaaaaat tttaaaag gttttt'g acagatct g'ctc'gac cagggc'g g'gcaatgag atgaltcag  atcactgcaa cctc'gct ctgggtcaa g'cagttctg tggctaaag ccttggcag ctgggtatg aggtcag  caccatgct g'gtaattt g'gatatua g'agatgaa g'gtttgcca ttgttcag g'c'ggaatt ttutttt taaattgat  aagacaggt attggc'g tggcagact g'gctcaaac tctgggctg aacaatct cccgctgg cctccaaag  tgc'ggat ataggcaca g'acacaaa taaattg ctgtatgca atattatt taaattg ttgtattac taaatgct  taatgcat tccaatatt ttactt'g actgtcaga g'gattctt tatta'g ttatagag ttatctt'g c'gagatc </p>	A	Homo sapiens
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629	190774	Histamine H4 Receptor	NP_067637.2	<p>acatttatt agtttggtta tttttgtcc tttaaaca ttttttttg agatgggggt ctgtctgt tgcaccagca ggaatgcagt ggcatgctt cagctcactg cagccctgac tgcctaggct ccagcaatct tctacgtca gctccagag tagctgggac cgaggagcact tgcaccacag cccacataaa aatttttaa atgttgctt tcttggaagt gttctgtcc tgtttgtc acaaaattc attttica tagttaattt catctctcg gtaagattt atgttggtt ctttatac ttggcagtc ttacacgtt tgggtattt catgtttt agaaacttia aacctttaac tcaaacatt aaaaatacaag tcttttaagt acatggagtc ttgaaatgt acataatgt tatataact tatgccttac attaaagtc aatatgagaa atacatggtt aacattcaat aataatttta aaaaattgag aataaaact tcaataatgc aaaaaaaaa aaaaaaaa</p>	P	Homo sapiens
630	190823	Formyl Peptide Receptor 1 (FPR1)	NM_002029	<p>MPDNTNSTNL SLSTRVTLAF FMSLVAFAIM LGNALVILAF VVDKNLNRHS SYFFLNLAIS DFFVGVISIP LYPHITLFEW DFGKEICVFW LTTDYLLCTA SVYNVLISY DRYLSVSNVAV SYRTQHTGVL KIVTLMVAVW VLAFLVNGPM ILVSEWKDE GSECEPGFFS EWTYLAITSF LEFVIPVLV AYFNMNITYWS LWKRDHLSRC QSHPGLTAVS SNICGHSFRG RLSSRRSLA STEVPASFHS ERQRRKSSLM FSSRTKMNSN TIASKMGFS QSDSVALHOR EHVLLRARR LAKSLAILG VFAVCWAPYS LFTIVLSFYS SATGPKSVWY RIAFWLQWFN SFVNPLLYPL CHKRFQKFL KIFCIKKQPL PSQHSRSVSS</p>	A	Homo sapiens
631	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	<p>ccagacctia gaactacca gagcaagacc acagctggg aacagtcag gagcagacaa gatggagaca aattctctc tcccacgaa catctcggga gggacacctg ctgtatctc tttcttgata tcatcatta tctgttatt gcatcacct ttgtctcgg ggtctggggc aacgggcttg tgaictgggt ggtcggatc cggatgacac acacagtcac caccatcagt tacctgaacc tggccgtggc tgaictctgt ttacacctca ctgtgcat cttaactgt cttatggtc aggaaggcca tgggaggaca tiggccttc ggctgttcc tgrgcaaat cgtctttacc atagtggaca tcaactgtt cggagatgic ttctgtatc cctcatgic tctggaccgc tgrtttgg tctgtcatcc agcttggacc cagaaccacc gcaactggag cctggccaag aaggatgata tggggccctg ggatgaggtt ctgtctccta catggcagt taltcatctgt gtagctacag taccgtgttaa aacgggggaca gtagcctgca cttttaact ttggccctgg accaacgacc ctaaaagagag gataaalgig gccgttgcca tgtgacgggt gaggaggcalc atccgggtca tcatgtgtt cagcgaccc algctcatcg ttgctgtcag ttatgggtt attgaccaa agalccacaa gcaaggcttg attaatcca gtcgtccctt acgggtcctc tctttgtcg cagcagocit tttctctc tggctccat atcagggtgtt ggccttata gccacagta gaatccgtga gnatgcaa ggcattgaca aagaatgg tatgcatg gatgtgaca gggccctggc ctcttcaac agctgctca acccatgt ctatgttc atgggccaag acttccggga gaggctgac cagcccttc ccgccaagt ggagagggcc ctgaccagg actcaacca aaccagtcac acagctacca atttactt accctctgca gagggtggagt tacaggcaaa gtagaggagg agctggggga cacttccag ctccagctc cagctctg tccactgag ttaggctgag cacaggcatt tctgtctat ttaggatta cccactcacc agaaaaaaa aaaaaagcct ttgtgtccc tgaattgggg agaataaca gatatgagt t</p>	P	Homo sapiens
632	190824	Formyl Peptide Receptor-like 2	NM_002030	<p>METNSSLPNTN ISGGTPAVSA GYLFLDIITY LVFAVTFVLG VLGNGLVIVWV AGFRMTHTVT TISYLNLA VA DFCFTSTLPF FMVRKAMGGH WPFGWFLCKF VFTIVDNLV GSVFLIALIA LDRVCVCLHP VWTQNHRTVS LAKKVIIGPW VMALLTLVP IIRVTTPGK TGTVACTFNF SPWTNDPKER INVAVAMLT RGIIRFIIGF SAPMSIVAS YGLIATKHK QGLIKSSRPL RVSFVA AF FLCWSPYQV ALIA TVRIRE LLQGMVKEIG IAVDVTSALA FFNSCLNPML YVFMGQDFRE RLIHALPASL ERALTEDSTQ TSDDATNSTL PSAEVELQAK</p>	A	Homo sapiens

(FPRL2)

633 190824 Formyl Peptide Receptor-like 2 (FPRL2) NP\_002021.2 P Homo sapiens

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caagcaatgt ga

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IFTIVLTLPN FIFWTITST NGDTYCINF AFWGDTAVER LNVTITMAKV FLILHFIFG  
TVPMSTTVC YGIIAAKIH NHMIKSSRPL RVFAAVVASF FICWFPYELI GILMAVWLKE  
MLLNGKYKII LVLINPTSSL AFFNSCLNPI LYVFMGRNFQ ERLIRSLPTS LERALTETPD  
SAQTSNTHTT SASPEETEL QAM

634 190948 EMR2 Hormone Receptor NM\_013447 A Homo sapiens

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635	190948	EMR2 Hormone Receptor	NP_038475.1	<p>agcaactcac tgcattgca gctctgctc tgcctcttcc tggccaccct cctctctc tgggcaattg atcaaacagg  acacaaggig ctgtctcca tcatcgccgg taacttgac tatctacc tggccaccct cacttgatg ctgttgagg  ccctgtacct ctctctact gcacgggaacc tgcagggtgt caactactca agcatcaaca gattcaigaa gaagctcatg  ttccctgtgg gctacggagt cccagctgtg acagtggcca ttctgcagc ctccaggct cactttatg gaacacctic  ccgtctctgg ctccaaccag aaaagggaatt tatatggggc ttcttgaggc ctgtctgagc cactctct tttctttct  ggtagcttc tggatttga aaaaagact ctctccctc aatagtgaaag tttccacct ccggaacaca aggatgctgg  cattaaagc gacagctcag ctgtcatc tgggtgcac gttgtgtctg ggtcatgc aggtgggtcc ggtgccccgg  gtatggct accttcac catcaaac agctgcagg gttgtctat ctctgtgtg tactgctcc tcagocagca  ggtcggggag caatatggga aatggcca agggatcagg aaattgaaaa ctgagctcga gatgcacaca ctctccagca  gtgtaaggc tgaacctcc aaocccagca cggtaacta gaaatcti ctgataaga tcttccct tggccggggg  aaaaatcgaa caatcttga gccatctaga ggggaaagaa agactttgt tctgtgtgt tcaagaaatt caccatgca gcaatatgaa  ggatgtatg gaaggctgc tiggcatca attctgcag aaocgggaaa tcttccatgc cctgcaatgt gctcatcaaa  ctctcagcat atggagggcc agctgtggcc catatcttgg tcaatctgaa gcacaaat tatgaagctc tagaagctta agaactctt  cacagctct cctctaca aagactctc caaatctaa aatgaagcag gaaacaagc ctgaaggac ttcataccg  acaacatctg aaaggactag aatgtcaca ccagatctg gatctttaa tttttgt tttttgt tttcttag ttctacgggt  ttgtattt agtcatgta aaaaatga ttactcac atagatcag agagacacgg cctctgctt catggagct ttgggggaaa  atgaaggcc tcttgagct agatgtact cagaagccga aatctctaga aatcaggtt ctactgtag gcaattgag tataaatat  ttataaaca ctgtctct tcatctac</p>	P	Homo sapiens
636	190955	Leukotriene B4 Receptor BLT1	NM_000752	<p>MGGRVFLVFL AFCVWLTLP AETQDSRGCA RWCPODSSCV NATACRNP  FSSFEIIT PMETCDDINE CATLSKVSCG KFSDCWNTG SYDCVCSGY  EPVSGAKTF NENENTCQDV DECQONPRLC KSYGTCVNTL GSYTCQCLPG  FKLKPEDPKL CTDVNCTSG QNPCHSSTHC LNNVGSYQCR CRPGWQPIPG  SPNGPNNTVC EDVDECSSGQ HQCDSTVCF NTVGSYSRCR RPGWKPRHGI  PNNQKDTVCE DMFTSTWTP PGVHSQTLR FFDKVQDLGR DYKPLANNT  IQSILQALDE LLEAPGDLET LPRLOQHCVA SHLLDGLDV LRGLSKNLSN  GLLNFSYPAG TELSLEVQKQ VDRSVTLRQN QAVMQLDWNQ AQKSGDPGPS  VVGLVSIPGM GKLLAEAPLV LEPEKQMLLH ETHQGLLQDG SPILLSDVIS  AFLSNNDTQN LSSPVTFHS HRSVIPRQKV LCVFWEHGQN CGGHWATTGC  STIGTRDTST ICRCTHLSF AVLMAHYDVQ EEDPVLTVIT YMGLSVSLC  LLLAALTFLL CKAIQNTSTS LHLQLSLCLF LAHLLFLVAI DQTHKVLCS  IIAGTLHYLY LATFTWMLLE ALYLFLTARN LTVVNYSSIN RFMKKLMFPV  GYGVPATVA ISAA SRPHLY GTPSRCWLQP EKGFIWGLG PVCAIFSVNL  VLFLVTLWIL KNRLSSNSE VSTLRNTRML AFKATAQLFI LGCTWCLGIL  QVGPAAARVMA YLFTIINSLQ GVFIIFYCL LSQVREQYQ KWSKGIRKLK  TESEMHTLSS SAKADTSKPS TVN</p> <p>gccattct cactccgt ggggtcagga agccctct gaactctgac ttacttct gctgcggtt ctgcccatt ttctatac  ctctgacagc tgcgaggtca tctctctt gctttct caagcagaac aatggggggc tctggaaagg ttaggggacc  tcagtggcca ccatttact tgcattct cctgagaagt gtaggttga agggagcag gaaggcccat ggtcagattg  aagggaaggac ttattgtt ctttttt ttgtgaat ggagctcgc tctgtctc cctgagc ccaagttagt gagactacag gcacatgoca  cactgcagcc tccattct ggttcatat gatctctg cctagcctc ccaagttagt gagactacag gcacatgoca</p>	A	Homo sapiens



637	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	<p> ctacaccag ctacttttg tattttagt agagagacgggg tttaacatg ttggccaggg tgggttcaaa ctgttaacat caagtgatct  gctccctca gcttccaaa gtgctgggat taccggatg aaccacaca acctgccagg aattttagt tttagctt ttgagggagac  ttcaaggaaa gtagagacatc ctctgtccag gaacagggtla agggggaccat ttctgcatg ctggttccc ctctggcag  gggtgggcag aggcaltcat gtctctgct cctcactct gctctcatg ctacgctgc cagctcggcc tcaacttgi gtgttcaaaag  tggaaactgaa tagtagctgt gagaagatag gaagagggtla ggtccaatct cctggccag atcataatc cagactcagc  agggttaacca catgggcaag cacaagtag gtgctgggg aagggggaag taattggcat tctgtgtat accaaggaga  ccatttggat ttggctct accaaaaga atgggaatt ggttgaacta aatggaaoca gtocctttaa gtaaggggag  gaagggggggt gctgggaagt ggcctcttc ccacaccta galtaagt tgaatgaag ccaaggacag agtgcctgccc  cctcggcat ttactgagt gccccttta aatcagatg ttactaac caaacccaga cccaggacct agtcacagt ccaacttaca  cttctattia atcttaaac aaagcgaac aaacacaaa agtatacagc attttagcct ccaactcag cccatttccc ttcttggt  accatactc cttctctat atgatacat ttactatt gttaattat ccagttaga cctgcatct gaggccacac ccagcttct  cactccac abcccttct ctctctac tgcctctcc tggctcttc tcatctggcc ccaacttcaa gtaggtctcc tgccttgg  gttgccttgg aaacagact atccccctc ctatgaagg ggtgggttag ggtgttcagc ccaacctca ggaagatgct  tcttccctgt cctctgtct gtgttacttc ctcttggt gatttagcaa acagaccta gacttggggc caggcttttg gcagtgggac  agatccagggt ataggctaca ccacctggcc ctgaccttgg gattggcalt agcttccaac cagttcttgc caaagcttgi  aagttctccc gacggccatg aacatacat ctctgcagc accccctca ctatgggttag agttcaltc tctgttggt atcaltctgc  tgtcagtggt gctggctgtg gggcttccc gcaacagcti tgggtgttgg agtattctga aaagggaagca gaagcgtct  gtcactggcc tgaatgtgt gaaacttggcc ctggccgacc tggccgtatt gctcactgt ccttttcc ttacttct gggccaaagg  acctggagt ttggactggc tgggtggcc ctgtgtcat atgtctcag agtcagatg taccgacgg tctgtctat  cacggccatg agtctagacc gctcactggc ggtggccgc cctttgtt ccaagaagt accgaccaag gctatggccc  ggcgggtgt ggcaggcalt tgggtgttgt ccttttgtt ggcacacccc gtctgtgt accgcacagt agtgccttgg  aaaacgaaca tgaactgtgt ctccgggg taccacagcg aaaggccacgg ggccttccat ctatcttgc agtctgtcac  gggtcttctg ctgcccctc tggctgtgtt ggcacagctac tgggacatag ggcgtcggct acagggccgg cgtctcggcc  gcaggccggc caccggccg ctgggtgtg tcatctct gaccttggc gctctggc tggccctacca cgttgggaac  ctggcttaga cggccggcc gctggccggc caggccggcc ggttagggct cgttggggaag cggcttgaagc tggccgcaa  cgtgtctatc gcatctgct tctttagag cagcgtgaac cccgtgtgt acgctgtgc cggccggccgg cgtctgct  cggccggcgt gggcttgc gccaaactgc tggaggggc ggtgttccag gcttccagca cggccggccgg gggcagcctg  ggccagacc ctaggaggg cccggccgt ctggagggcc gcttccga gaggcttact gctccagcc ctctcaagt  aaacgaactg aactaggct ggttggaaagg ggcacatt cctctggca gaatgttagc tcttagccag ttacttact  ggaggaggag caggggctg gaggggctg agggcgttgg agcgttggag gggggaggg agtgggaagaa  gggggaaga tggagcaag tgaaggccga gttagagcgt gctccagct ggtccacca ggcagcttta accattaaa  ctgaagctg aa </p>	P	Homo sapiens
638	191039	Trace Amine	AF380185	<p> MNTTSSAAPP SLGVEFISLL AIILLSVALA VGLPGNSFVV WSLKRMQKR  SVTALMVLNL ALADLAVLLT APFLHFLAQ GTWSFGLAGC RLCHYVCGVS  MYASVLLITA MSLDRSLA VA RPFVSQLRT KAMARRVLG IWVLSLLAT  PVLAYRTVVP WKTNMSLCFP RYPSEGHRAF HLFEAVTGF LLPFLAVVAS  YSDIGRRLLQA RFRRSRRTG RLVLJLITF AAFWLPYHVV NLAEAGRALA  GQAAGLGLVG KRLSLARNVL IALAFSSSV NPVLYACAGG GLRSAGVGF  VAKLLEGTGS EASSTRGGS LGQARS GPA ALEGPSESL TASSPLKNE LN  atgagcct ttggccaa lataattaat atttctgt tgaataaaa cttggcaaat gatgtccggt cttccgtgta cagttaatg </p>	A	Homo

639	191039	Trace Amine Receptor 1 (TA1)	AAK71236.1	<p>ggtcatala ttctgaccac actcgttggc aatctgtag ttattgtt tatacacac ttacaacac ttataccccc aacaaattgg ctcattcatt ccatggccac tggtagctt cttctggggt gcttggtat gcttacag atggtagag atgctgagaca cgttggtat ttggagaag tctctgtag aattcacaca agcacagaca ttatgctgag ctacgctcc atttccatt tctttcat ctcattgac cgttactatg ctgtgtgtag tccactgaga tataaagcca agatgaatat ctgggtatt tggtagtaga tcttattag ttggtaggic cctgctgtt ttgattgg aatgactt ctggtagctaa acttcaagg cgttagagag alatalata aacatgttca ctgcaaggga ggtagctg tctttag caaataat gggtactga cttttatg tttttat ataccgtggt ctatattgt atgtgtat tacaatalat alttaltgc taaagacag gcaagattaa ttatgtagc caatcaagag ctccaattg gattggaaat gaaaatgga atttcaaaa gcaagagaag gaaagctg agacattg gtagattg gtagattg ctataatgct ggtagctt cttatctg acagatgg accctttct tcatcatt attcacctia ctttgaatg tggtaggt acttgaact lacattaat ccaatgggt atgattt ctatctgg tttagaaag cactgaagat gattgctt ggtaaaatt tcaaaaaga ttatcagg tgaattat tttagaatt gatttcatag</p>	P	Homo sapiens
640	191132	G Protein- Coupled Receptor 88 (GPR88)	NM_022049	<p>MMPFCHNIIN ISCVKNWNVN DVASLYSLM VLILITLTVG NLIVIVSISH FKQLHTPTNW LIHSMATVDF LLGLVMPYS MYRSAEHCWY FGEVFCIKHT STDIMLSSAS IFHLSFISD RYVA VCDPLR YKAKMNLVI CVMFISWSV PAVFAFGMIF LELNFKAEE IYKHHVHCRG GCSVFFSKIS GVLTFMTSFY IPGSIMLCVY YRIYIAKEQ ARLISDANQK LQIGLEMKNG ISQSKERKAV KTLGIVMGVF LICWCPFFIC TVMDPFLHYI IPTLNDVLI WFGYLNSTFN PMVYAFFYPW FRKALKMMLF GKIFQKDSRR CKLFLELSS</p> <p>gggttccaca ttagccaca ctcgtctc ttagccaggg ggtgctct cttgagctca gcttctgatt ttgagccaa gcatcttgc tgcgtgcgc tgcctggcca cccgctggg ctggagccc ggcatttacc ttctcagc cctgtataca gctgagaagt ctccctggcag ctgtagtgc ctggccaagg ccatgtgtgt gtagtctgt tggtagaagag gggcacttgc tctggcact gattccagct gatttctc tttttatc tggaccactg atgtgtgt tggtagaagga ttcttggca tccctcccc ttgagacacg gctaaaggacc agctaaagc caaggcagga caggttcaagg atggagccgg ctggcagaaag ccgagcgttag cgaaggtaggt gtagaaggtt ggccaagatg accaactct cctccacat cactctccc accacgggtt gctcgtgctg gctcgtctg gtagaagtag agtctggggc ggccggggc atccgggtt cactctgt ttcggggcgg ggcacggggc ggcacggcggc caacggcag gttatctat tctgtctc ttccggaag ctggcagaca ccaagcaagc cttcattgt aacggcggc ccggcggact cagcgtctgc gctcttggga tggcggcagg ggtggtgtct gggtctctgc ccaacggcgtc tggtagggcc ccggcaggact ggtagggcggc tggtagggcagg taacggcgtgc taagggggtgg gctgtgtggc ctggtagacta cgtgtgtct cctctccac tggcgtgtgg ccttgaacgg ctactgtct atcacccggc ggccggccac ctacacggcgg ctgttaccaga ggcggccacac ggccggcggc ctggcgtgt cctggggcgt cggcctggggc ctgtgtgtgc tgcctccggc ctggggcagcc cggccggggc cggcggccac tggtagggc tggtagggc tggtagggc tggtagggc tggtagggc tggtagggc tggtagggc gcttgcactgc taacttgggca tggtagggc cgtgtgtgtgc agcgttcaagc ggttcaagc gcttcaactc cacttgcgt accaggttggc cggcgtggc ggccggcggc cggcgttccc gggtggcggc cagcggcggc ggccggcggc ggccggcggc ccggcggcggc ccaagcggc cgttggcggc cgttggcggc cgttggcggc cgttggcggc cgttggcggc cgttggcggc gcttgcgtgc gcttgcgtgc tggtagggc ggttggcggc tggtagggc tggtagggc tggtagggc tggtagggc tggtagggc ggtagggcggc cggcggcggc tggtagggc tggtagggc tggtagggc tggtagggc tggtagggc tggtagggc tggtagggc ggtagggcggc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc tcccggtt cggagctt tggtagggc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc cgttgcgtgc tggtagggc gaaatgggg ccttgcggc cgttgcggc cgttgcggc cgttgcggc cgttgcggc cgttgcggc cgttgcggc tggtagggc gaaatgggg ccttgcggc cgttgcggc cgttgcggc cgttgcggc cgttgcggc cgttgcggc</p>	A	Homo sapiens

641	191132	G Protein- Coupled Receptor 88 (GPR88)	NP_071332.1	<p>gocggaagc atttggagc gccacctgat tttaacctt tttttctgtg tttagaggga atcttaaggt caaaacacaa gagacttgaa  gaacttgcaa actggcggtt taataatacc ggtaatta ttccacaa gttgtttt gaaaaagagc ttcataatg tataacctt  tccacttca tgccttata talgaagcgc ctggagtgig calgaaccaa aggaataaac attgaagag gaaacaata  tgaagaagt atttagaaa gtaacctgic tttagalg ctctctac caattgtt ttgataa ccttgaggca gtagagccct  agggtggccc accagtatga gtggccatla agacctcaag ccccttacc ttaaaagggt tttaataaa gcttttca aalgaggtag  aatcttagcc agtgaagaaa azaattatt tatgtctctt ttntcgca ctctaaagc tgaataagg cgtttagtgt tatagtga  atttccagt ttgataatg atggcagag ccagcacitgg aatttgaaa acaataagg tgattatcta tttaggtac cgtttacat  ttttatagc atgcacacti gtgtctacc tcaatttga accaattat ttgcctatg aatggatg cagcttgaa caticgtac  tgtaatggt gtaagaaga ataatgctt ctgttttc ttacattt aaataatc aalgacalg atataatla acataala  taccatgact gcatagctaa tattagctgc tatgtatgc tctatagtc tagaactat tggscatgig gtaactlgaa gcgatacccc  tiagacaagg atatttact tcttccagc accagaagaa atggccttca attattgaa agagaacaa gagacacctc tggctacct  gagttctcc tgtcttgacc aattatgag aaagcttcca gtgggacti tatctcaa ggggaatcac agtcaagagc galcaalaat  atgttggct cagcaagoc agctgtgic tttagggti taacagoc acagctaga aagcaacact gttttatgt agttcata  tattaccag acattiaa tcaatitgt alattitga ggaagtata taaactcagt calatatagt gaacagtca aalgaggaa  tgttcaaaa catattat gaggttgc atattatct ttgtttact aaatttact agaatattt gaaatgcaa atgtgtgaa  atcactat caatlaaaa tgggaagaaa gtaattttaa taattttaa taatcaatg tcaacttct gactactac cacatcaat  ctgggcccac acagccicag ttaacatg aaltcaggaa caaacacgc ttgtttgt gcacgcttgg gcaatticag  ccaggacatt aggaacacti gtgtacalc tgaataatla tggagtgig gacatgaa ggaatacaaa tatgtalc accaacaatc  agctgtact ttaataatc atoccttgg tgcagcacc atttctct tactaacagt tcaatctgt cacatttcc tigtacaaa  tattaaagt cagaataaaa aaaaaaaa aaaaaaaa</p>	P	Homo sapiens
642	191168	P2Y12 Platelet ADP Receptor	NM_022788	<p>MTNSSSTSTS STTGSLLLL CEEESWAGR RPVSLLYSG LAIGGTLANG  MVTYLVSFR KLQTTNFI VNGCAADLSV CALWMPQEA V LGLLPTGSAE  PPADWDGAGG SYRLRGGLL GLGLTVSLLS HCLVALNRYL LITRAPATYQ  ALYQRRHTAG MLALSWALAL GLVLLPPWA PRPGAAPPRI HYPALLAAAA  LLAQTALLLH CYLGIVRRVR VSVKRVSVLN FHLLHQLPGC AAAAAAFPGA  QHAPGPGGAA HPAQAQPLPP ALHPRRAQRR LSGLSVLLC CVFLATQPL  VWVSLASGFS LPVPWGVHAA SWLLCCALSA LNPLLTYWRN EEFRRSVRSV  LPGVGDAAAA AVAATAVPV SQAQLGTRAA GQHW  ggctgcaata actactact actggalaca tcaaacct cagaataca cagtatcag gtaaccaaca agaaalgcaa  ggcgtcgaca acctcacctc tggcctggg aaacacagc tgtgcacag agactacaa atccccagg tctctccc  actgcctac actgtctgti ttgtgtgg actatcaca aatggcctgg cgalaggat ttcttcaa atccggagta aatcaaat  tatttttt ctlaagaaca cagcattic tgaatctic atgatttga cttttcatt caaatitct agtatgcca aactggggaac  aggaccactg agaaacttgg tgtgtcagt tacctcgtc atatttatt tcaatgta tatcagatt tcaatctgg gactgataac  taltgaltgc taccagaaga ccaccaggc atttaaaaa tcaacocca aaaaactct gggggctaaag atttctctg tigtatctg  ggcattcag ttactacti cttgtctaa catgattctg accaacagg agccagaga caagaatg agaaaatgct ctttcttaa  atcagaatg ggtctagt ggcataaat agtaaatlac atctgtcaag tcaatttct gattaattc ttaatttga ttgtatgta  tacactcatt acaaaagaa tgaaccgtc atacgtaaga acgagggggg taggttaagtt cccacaggaaa aaggtgaacg  tcaaaattt cattatcatt gctgtatct ttattgti tgtcttct cattttcc gaaatccta caccctgagc caaacccggg  atgtcttga ctgcactgt gaaaatactc tttctatgt gaaagagagc actctgtgt taactctt aaatgcatgc ctggatccgt  tcatctatt ttctcttg aagcttca gaaatctt gataatgag ctgaatggc ccaatctgc aactctgc tccaggaca</p>	A	Homo sapiens

643	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	<p>atagagaaaa agaacaggat ggtggtagc caaatgaaga gactccaatg taacaaraat aactaaggaa atatttcaat ctctttgt tcaagactg taaagcaaa ggcctaagta aaaaataaa ctgacgaaga agcaactaag ttaataataa tgaacttaaa gaacagaag attacaaaag caattttat ttactttcc agtatgaaa gctatcttaa aatatagaaa actaatctaa actgtagctg tattagcagc aaaaacaacg ac</p> <p>MQAVDNL TSA PGNTSLCTRD YKIQVLFLP LYTVLFFVGL ITNGLAMRIF P Homo sapiens</p> <p>FQRSKSNFI IFLKNTVISD LLMILTFPEK ILSDAKLGTG PLRITFCQVT SVIFYFTMYI</p> <p>SISFLGLITI DRYQKTTTRPF KTSNPKNLLG AKLSVVIWA FMFLLSLPNM ILTNRQPRDK</p> <p>NVKKCSFLKS EFGLVVHEIV NYICQVFWI NFLIVVCYT LITKELYRSY</p> <p>VRTRGVGKVP RKKVNVK VFI IIAVFFICFV PFHFAPIPT LSQTRDVFDC</p> <p>TAENTLFYVK ESTLWLTSLN ACLDPFIYFF LCKSFRNSLI SMLKCPNSAT</p> <p>SLSQDNRKKE QDGGDPNEET PM</p>
644	191193	Trace Amine Receptor 3 (TA3)	AF380189	<p>atggagaata attctcca agctgaggct gggagcgtg gtiacaagaa cgtgaacgaa tctgcattaa aaactctta</p> <p>ctgcagggt cctcgatcta tctctacgc cgtccttggg ttggggcgtg tgcctggcagc gtttggaaac ttactgggtca tgaattgctat</p> <p>ccttacttc aaacaactgc acacactac aaactttcgt attgcgtcgc tggcctgctg tgaactttcg gttggaggtca cgtgtagcc</p> <p>cttcagaca gttgaggtcgt tggagagctg ttggtactt gggagacagt actgaatit ccaatacagt ttgacacat cctctgttt</p> <p>tgtcttta ttacttat gcgtatctc tgttgataga tacaattcgt ttactgacc tctgacctat ccaaccaagt ttactgtgc</p> <p>agtttcaggc atatgcattg tctttcgt gttctttct gtcacalaca gcttttcgt cttaacacg gggagccaacg aagaaggaat</p> <p>tggagaaata gtagtgcctc taactgtgt agggagcgtc caggctccac tgaatacaaaa cttgggtccta cttgtttc tictattct</p> <p>tataccaat gtcgccatgg tgtttatata cagtaagata ttutttggg ccaagcaatca ggtagggaag atagaaagta</p> <p>cagocagoca agctcagctc tctcagaga gtiacaagaa aagagtagca aagagggcgtc caaaaccttg</p> <p>ggaaatgcta tggcagcatit tctgtctct tggctaccat acctcgtga tgcagtgat gattgttata tgaatttt aactctctt</p> <p>taigttaag agattttat ttgtgtgtt tattataat cagctatgaa cccctgtat taigtctct ttaccaatg gtttgggaag</p> <p>gcaataaaac ttatgtaag cggcaagtc ttaaggactg attcgtcaac aactaatia ttitctgaag aagiagagac agattaa</p> <p>MVNNFSQAEA VELCYKNVNE SCIKTPYSPG PRSILYAVLG FGAVLAAFGN P Homo sapiens</p> <p>LLVMIAILHF KQLHTPTNFI IASLACADFL VGVTVMPFST VRSVESCWYF</p> <p>GDSYCKFHTC FDTSFCAFSL FHLCCISVDR YIAVTDPLTY PIKFTVSVSG ICIVLSWFFS</p> <p>VTYSFSIFYT GANEEGIEEL VVALTCVGGC QAPLNQNWVL LCFLLFFIPN</p> <p>VAMVFYISKI FLVAKHQARK IESTASQAQS SSESYSKVA KRERKAAKTL</p> <p>GIAMAAFLVS WLPYLVDVI DAYMNFITPP YVYEILVWCV YVNSAMNPLI</p> <p>YAFFYQWFGK AIKLIVSGKV LRTDSSTTNL FSEVEITD</p>
645	191193	Trace Amine Receptor 3 (TA3)	AAK71240.1	<p>atgaatgagc cactagacta tttagcaaat gcttcigatt tcccagata tgcagcigt ttggaaat ttggaaatg aaacatcca</p> <p>ctcaagatgc actaacctcc tgtttattat ggcatattct tctcgttggg atttccagc aatgcagtag tgaataccac ttacttttc</p> <p>aaaatgagac cttagaagag cagcacatc attatgtcga accttggctg cactagctg ctgtatctga ccagctctcc</p> <p>cttccgtatt cactactatg ccagtggcga aaactggatc ttggagatt tcatgttaa gttatccgc ttacgtcc atttcaact</p> <p>gtatagcagc atctcttcc tcaactgtt cagcaatctc cgtactctg tgaatcaca ccaatgagc tgcatttcca ttcaaaaac</p> <p>tcatgtgca gtttagctt gtcgttggg ttgagatcatt tcactgttag cttcattcc gatgacctc ttgatcaca caaccaacag</p> <p>gaccaacaga tcatgctg tcatgacac cagttcggat gaactcaata ctattaaag ttacaacctg atttgcag caactatt</p> <p>ctgcctccc ttgggttag ttgacattg ctataccag attatccaca ctctgacca tggactgcaa actgacagct gccttaagca</p> <p>gaaagcacga aggttaacca ttctgtact ccttgcatt taccgtatt tttaacct ttactatgt agggcattc ggatcgatc</p> <p>tcgcttctt tcaatcatt gttocattga gaatcagatc catgaagct acatgtttc tagaccatta gctgtcttga acactttg</p>
646	191196	G Protein- Coupled Receptor GPR80	AF411109	<p>atgaatgagc cactagacta tttagcaaat gcttcigatt tcccagata tgcagcigt ttggaaat ttggaaatg aaacatcca</p> <p>ctcaagatgc actaacctcc tgtttattat ggcatattct tctcgttggg atttccagc aatgcagtag tgaataccac ttacttttc</p> <p>aaaatgagac cttagaagag cagcacatc attatgtcga accttggctg cactagctg ctgtatctga ccagctctcc</p> <p>cttccgtatt cactactatg ccagtggcga aaactggatc ttggagatt tcatgttaa gttatccgc ttacgtcc atttcaact</p> <p>gtatagcagc atctcttcc tcaactgtt cagcaatctc cgtactctg tgaatcaca ccaatgagc tgcatttcca ttcaaaaac</p> <p>tcatgtgca gtttagctt gtcgttggg ttgagatcatt tcactgttag cttcattcc gatgacctc ttgatcaca caaccaacag</p> <p>gaccaacaga tcatgctg tcatgacac cagttcggat gaactcaata ctattaaag ttacaacctg atttgcag caactatt</p> <p>ctgcctccc ttgggttag ttgacattg ctataccag attatccaca ctctgacca tggactgcaa actgacagct gccttaagca</p> <p>gaaagcacga aggttaacca ttctgtact ccttgcatt taccgtatt tttaacct ttactatgt agggcattc ggatcgatc</p> <p>tcgcttctt tcaatcatt gttocattga gaatcagatc catgaagct acatgtttc tagaccatta gctgtcttga acactttg</p>

647	191196	G Protein-Coupled Receptor GPR80	CAC51133.1		taacctgtta ctatatgtgg tggcagcaga caactttcag caggcttgtct gctcaacagt gagatgcaaa gtaagcgggga accitggaga agcaaaagaaa atagtact caaacaacc tga MNEPLDYLAN ASDFPDYAAA FGNCTDENIP LKMHYLPVIY GIIFLVGFPG NAVVISYIF KMRPWKSSSTI IMLNLACTDL LYLTSLPFLI HYYASGENWI FGDFMCKFIR FSHFNLYSS ILFLTCSIF RYCVIIHPMS CFSIHKTRCA VVACAVVWII SLVAVPMTE LITSTNRTRN SACLDLTSSD ELNCTKWYNL ILTATTFCLP LVIVTLCYTT IIHTLTHGLQ TDSCLKQKAR RLTIILLAF YVCFLPFHIL RVIRIESRL SISCSENQI HEAYVSGPL AALNTFGNLL LYVVVSDNFQ QAVCSVTRCK VSGNLEQAKK ISYSNNP tccctggccc ttaataaag actaaatc ttaagctc tgaattctc tctgttaaaa caggggcggg aattaccaca taacaggctg gtcagaaaa tcagigaaca tgcagcaggf gctcaagctc tgttttgt tccaggggca ccagtgaggg ttctcagc atggatocaa ccacccggc ctggggaaaca gaagaataca cagigaatgg aatgaccaa gccctctc tgccttggg caaggagacc ctgaltccgg tctctgtat cctttcatt gccctggctg ggcctggagg aacggggtt gfgctcggc tctggggtt ccgcalgcgc aggaacgct tctctgtc cgtctcagc ctggccgggg ccgacttct cttctcgc ttccagatta taaatgctt ggtgtacct agtaactct tctgtcat ctccatcat ttccctagt tcttccac tggatgacc tggcttacc tggcaggct gagcaltg agcacccgca gccaggagg ctcctgtcc gtcctgggc ccactggga tgcctggcc cggccacagac accgtcagc ggctgtgt gtcctgtc tggccctgc cctactcgt agcalctgg aagggaagt cgtggcctc ttattagt aggtgact tgggttgt cagacattg attcatc tgcagcggg cgtatttt taticatgt tctcgtggg tccagtcgg ccctcgtgt caggatctc tgggttoca ggggtctgoc actgaccagg cgttacctga ccatcctgt cacagtctg ggttctctc tctgggct gccctggc attcaggt tctaatat atggatcgg aaggatctg algcttatt tigtatatt catcagtt cagtgtct gcatctct aacacagtg ccaacccat catttactc ttgggtgt ctttaggaa gccagtggcg ctcagcagc cgatctcaa gctgtctc cagaggcct tgcaggacat tgcctggg gatacagtg aaggatgtt ccgtcaggcc acccggaga tgcgagaag cagtctggg tagagatga cagcctac tccatcaga tatatggc ttggagagg aacttggc cgtctgt gatttgtga acttctcag tctgtatt aaaaacaga agagatgt tggaggtt aagtgaaca MDPTPAWGT ESTVNGNDQ ALLLCGKET LIPVFLILFI ALVGLVGNF VLWLLGFRMR RNAFSVYVLS LAGADFLFC FQIINCLVYL SNFFCSISIN FPSFTTVMT CAYLAGLSML STVSTERCLS VLWPIWYRCR RPRHLSA VVC VLLWALSLL SILEGKFCGF LFSDGDSGWC QTDFTTAAW LIFLMVLCG SSLALLVRIL CGSRGLPLTR LYLTILLTVL VFLLCGLPFG IQWFLIWIW KDSDVLFCHI HPVSVVLSL NSSANPIYF FVGSFRKQWR LQQPILKLAL QRALQDIAEV DHSEGCGRQG TPMSRSSLV tcatatatt gacattcti ttcaggcaa agtttagat acacttgg caltttctt gcatatgtt gcaaatgtt gfgcttgaag altctgtt tcttgcagg ttcagacti gccatagag ctgggatgg tcatgtgac atggcctc atggatgcca gfgaagcagg actcaggga atgcctca cactatgga agaaactc tagatcat tgaagaagg agacttgg ttaactct gcttaaat aataacatag catitggga tgaatgca atacaggtt ccatagtat ataatat gacaataatc tccacagctg gtacatatt gccaaatg gtagcataga tagggatga tgtatccaa gctatgag aatgagcat gccaaatga atgaattgg cttcattga attcatat tgccttga aagcaaat gaagcaaat aagggcagg tggcaatga gccacagcat gtgocaaatg caagtatga tccctca cactccagg tgaactc gggcaggagg acatcacat ctacagtagg tgcgcaag attagcaga gttgcaat gacaactgg atggcgtg agtgaagat aataaggatc ggtctataga ggcactcag aaattctgt aattgggat caaagctga ggcagcaaa atttccag acttgcga aatgcaggag atgcaaaag taagctcac tccaacatt gctgtccgtg tttaatgt gaaagtctt ggttctoca tgaanaagct cgtgtcggca	P	Homo sapiens
648	191218	MrgX2 G Protein-Coupled Receptor	AY042214			Homo sapiens	
649	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1			Homo sapiens	
650	191222	G Protein-Coupled Receptor Ls191222	LG94359			Homo sapiens	

651	191222	G Protein- Coupled Receptor Ls191222	ENSP00000199 719	QTLAMHSIE MINNSTLLPG VKLGYEYDTC CTEVTVAMAA TLRFLSKFNC SRETVEFKCD YSSYMPRVKA VIGSGYSEIT MAVSRMLNLQ LMPQVGYEST AEILSDKIRF PSFLRTVPSD FHQIKAMAH L IQKSGWNWIG IITDDDDYGR LALNFIQA EANNVCIARF EVLPFLSDN TIEVRINR TL KKIILEAQRN VIVVFLRQFH VFDLFNKAAIE MNINKMWIAS DNWSTATKIT TIPNVKKIGK VVGFAFRGN ISSFHSFLQN LHLLPSDSHK LLHEYAMHLS ACAYVKDIDL RLHISQLAV FALGYAIRDL CQARDCQNP AFQPWELGV LKNVFTDGV NSFHDAHGD LNTGYDVVLW KEINGHMTVT KMAEYDLQND VFIPDQETK NEFRNLKQIQ SKCSKECSPG QMKKTTTSRQH ICCYEQNCNP ENHYTNQTD M PHCLLCNNKT HWAPVRSTMC FEKEVEYLNW NDSLAILLI LSLGIIFVL VVGIIITRNL NTPVVKSSGG LRVCYVILLC HFLNFASTSF FIGEPQDFTC KTRQTMFGVS FTLCSICLT KSLKILLAFS FDPKLQKFLK CLYRPILIF TCTGIQVVIC TLWLFAAPT VEVNVS LPRV ILECEEGSI LAFGTMLGYI AILAFICFIF AFKGYENYN EAKFITFGML IYFIAWITFI PIYATTFGKY VPAVEIIVL ISNYGILYCT FIPKCYVIIC KQEINTKSAF LKMIYSYSSH SVSSI	P	Homo sapiens
652	193511	EGF-Like Module- Containing Mucin-Like Receptor EMR3	NM_032571	tttttgagc taggaagggt gggtggcta cggcacaga gagagcttcc agggctggct ggcgigggat accgtacca cagaagaagc gggaacatg ctcttcag gcctctgctt tctgtcagc ctcttgagc ctgtgagca gaatacaca acttctgtg ctaaggccc ccaaatgct tctgtgta ataacactca ctgcacctgc aaccttggt atacttgg atctggcgag aaactatca cattccctt ggagacatgt aacgacatta algaatgac accacctat agtataat gggtattaa ctcgtgtgtg tacaatgctg aagggaagtt ctactgtcaa tggttccag gatatagact gcattctggg aatgaacaat tcaatgaatic caatgagaac acctgtcagg acaccacct ctcaagaca accgaggggca ggaagaagagct gcaaaagatt gggaacaat ttgagtcact tctaccaat cagacttat ggagaacaga aggggagaca gaaatctcat ccacagctac cactatctc cgggagtggtg aatcgaaggt tctagaact gccttgaag atccagaaca aaaaagtctg aaaaatccaa acgtagtgt agctatigaa actcaagca tacaagcaa tggcttgaa gaaagaaaga catcaacti gaactgcca atgaactcaa tggacatccg ttgcagtgac atcatcagg gagacaca aggtccaggt gocatgctt ttatcata tttctctt ggaacaatca taaatgcaac ttttttaa gagatggata agaaagatca agtatactg aactctcagg ttgtgagtg tctatigga cccaaaaggga acgtgtctt ctccaagctt gtagcgtga ctccaaga cgtgaagatg accccaagta ccaaaaagggt ctctgtgtc tactgggaaga gcacaggggca gggcagccag tggttccagggt atggctgtgt cctgatacac gtagaacaaga gtcacacat ggtgaatgc agtaccctgt ccagctcgc tggcttgatg gcccigaaca gccagggagga ggaatccgtg ctgactgtca tcaactagt ggggctgagc gttctctgc tggctctct cttgtgggccc ctactttc tctgtgttaa agccatccag aacaccagca cctcactga tctgcagctc tggctctgc tttctctgc ccactctc tttctctgc tttctctgc tttctctgc tttctctgc gctccatcat cggcgggtgt ttgcatale tctacttgc ccactctc tttctctgc ggaatgagc aactgaaccc aagggtgtgt ggaaacctgac agtggatcaac tactcaaga tcaatgaact calgaatgag atcatttcc cagtcgggcta tggcgttccc gctgtgtgac tggccattc tgcagctcc tggcctcacc ttatggaac tgcatacga tgcgtggctcc accigtgacca gggattcatg tgggtttcc tggccaggt ctgtgcccatt tttctgga atttattt gttttttg gttttttg tttttttg aaaacttcc tccctcaata gtagaagtc aacatccag aacacagaaga tgcgtggctt caaagcaaca gctcagctct tcatctgggg ctgcacatgg tgcgtgggtg tgcatacaggt ggggtccagct tggccatgca tggccatcct ctccacalc	A	Homo sapiens

653	193511	EGF-Like Module- Containing Mucin-Like Receptor EMR3	NP_115960.1	<p>atcaacagcc tcaagggtt cttcaltctt ttggttactt gctctctcag ccagcaggct capaaacaat atcaaaagtg  gtttagag atcgtaaaat caaaatctga gcttgagaca tacacattt ccagcaagat ggttctdgac tcaaaaccca  gtgaggggga tgttttcca ggacaagta agagaaaaa taaactag aattatcac tccatatega aatcataic catgatctc  ttggcatia tgaagaatga agctaaaggaa aagggaattc attaaacata tcatcttgg agaggagta atcaacctt acttccaag  ctgtgttc tccaatag gcttcaaca atgtgtgtt aaattgatt tcttcaaa aaaaaa  MOGPLLLPGL CFLSLFGAV TQTKTSCAK CPNASCNN THCTCNHGYT P  SGSGQKLFTF PLETCNDINE CTPPSVYCG FNAVYNVEG SFYCQCPGY  RLHSGNEQFS NSNENTQDPT TSSKTTEGRK ELQKIVDKFE SLTNTQTLWR  TEGRQEISST ATTILRDVES KVLETALQDP EQKVLKQND SVAIETQAIT DNCSEERKTF  NLNVQMNSMD IRCSDHQD TQGPSAIAFI SYSSLGNIIN ATFFEEMDKK  DQVYLSQVV SAAIGPKRNV SLKSVTLTF QHVKMTPTSK KVFCVYWKST  GQGSQWSRDG CFLHVNKSH TMCNCSHLS FAVLMALTSQ EEDPVLTVIT  YVGLSVSLLC LLLAALIFLL CKAIONTS TS LHLQLSLCLF LAHLLFLVGI  DRTEPKVLCS IAGALHYLY LAAFTWMLLE GVHLFTARN LTVVNYSSIN  RLMKWIMFPV GYGVPATVA ISASWPHLY GTADRCWLHL DQGFMSWFLG  PVCAIFSANL VLFILVFWL KRKLSSLNSE VSTIQNTML AFKATAQLFI  LGCTWCLGLL QVGPAQAQVMA YLFTIINSLQ GFFILVYCL LSQQVQKQYQ  KWFREIVKSK SESETYTLSS KMGPDSPSE GDVFPQVKR KY  KHAYICLAAI WAYASFWTM PLVGLGDYVP EPFGTSCITLD WWLAQASVGG P  QVFILNLF CLLPTAVV FSYVKIAKV KSSSEKVAHF DSRHSHSVL EMKLTKVAML  ICAGFLIAWI PYAVVSVWSA FGRPDSIQ LSVPTLLAK SAAMYNPIY  QVIDYKFACC QTGGLKATKK KSLGFRLHT VTVRKSSAV LEIHEEV  agcgaacct cggggcgccg gggagccag ttggagcggc gggagggcgcc agcagcgc gggatgctgt ggtggggcgcc  gaaaaagcca gggcgccag ccggaggggc tccggcgccg ggttagatgg tgcacagagg gggcgggggc tgcgggagaga  caggcgagg gggggggggc cggggcgccg gcaggggccc gggagggggc ccggcgccg gggccagccc  aaggcccgga ccggggcgcc gggcggtgga ggcgtgca gggagcgggga gattgagggc agggcgccg  cgtggcgggg ctcggggga ccgctgccc ccatctct cttcttctt tccctcag ccaggaggag  ctggggggcg gggcgacca gggctgggac ccaggcttag ctggacac gggggcag ggcatacg gggcgggagc  cttagctt ttcgggagt ctccgggggt ccgggagagat gggggggccg gctgggggt caggagagct aittcgtgg  ggctccagg gaggaggcaa agcggccgga atagtcgagg gccccctgag cagccgaatg agggagctgg gattgaacac  ggcgccagc cattggcag ccgcaacga gaggacaggac agggagaccagg gtcgtgta taccggcc cagggtc  cttggcggg cggacaggac ctggcaag aggtagctg taccagggg cttgctct agggggccc ggtcggggga  acagctgccc cttcttca gactttga tccggacca cgggtcccaag ccggtgctt cccagcgga cgtgggaca  gggtcccgca aagaatggg caccggcg tctgtgggg aattatggg aacaggagac aggggtcagg gcgagagagc  cacgacatcc gggagagaaa gggagcccc ccggcggaac tgtcttca ggggtccggg atctggcccc gactggalt  cagcaccacg cagcgagg acagctctg catcagttc agcaccccc ggtctcggga cagctcccg gccggcgccc  aaggcgatgc gctccgggg tcttccg tccgcttcc cccggggcg cccggggcg cgtccccgg gactccggc  ccgtctgaa gccaggaaa taactcggc gaacggggca cgtttctg gggcgcaaa ccggccacccg cagtccggc  agtiacaacia ccagagctg ggtccgggaga atgaggcagc agggcagcg ggtctacgg tgggtgttca ggaacggac  ggcggcgagg ccggggcgt agtctctg ctggcgggcac tcaagaacag ccgctcgctg ggtgtttca gcatcgacc</p>	Homo sapiens
654	193516	G Protein-Coupled Receptor dl402H5.1	CAC21687.1	<p>atcaacagcc tcaagggtt cttcaltctt ttggttactt gctctctcag ccagcaggct capaaacaat atcaaaagtg  gtttagag atcgtaaaat caaaatctga gcttgagaca tacacattt ccagcaagat ggttctdgac tcaaaaccca  gtgaggggga tgttttcca ggacaagta agagaaaaa taaactag aattatcac tccatatega aatcataic catgatctc  ttggcatia tgaagaatga agctaaaggaa aagggaattc attaaacata tcatcttgg agaggagta atcaacctt acttccaag  ctgtgttc tccaatag gcttcaaca atgtgtgtt aaattgatt tcttcaaa aaaaaa  MOGPLLLPGL CFLSLFGAV TQTKTSCAK CPNASCNN THCTCNHGYT P  SGSGQKLFTF PLETCNDINE CTPPSVYCG FNAVYNVEG SFYCQCPGY  RLHSGNEQFS NSNENTQDPT TSSKTTEGRK ELQKIVDKFE SLTNTQTLWR  TEGRQEISST ATTILRDVES KVLETALQDP EQKVLKQND SVAIETQAIT DNCSEERKTF  NLNVQMNSMD IRCSDHQD TQGPSAIAFI SYSSLGNIIN ATFFEEMDKK  DQVYLSQVV SAAIGPKRNV SLKSVTLTF QHVKMTPTSK KVFCVYWKST  GQGSQWSRDG CFLHVNKSH TMCNCSHLS FAVLMALTSQ EEDPVLTVIT  YVGLSVSLLC LLLAALIFLL CKAIONTS TS LHLQLSLCLF LAHLLFLVGI  DRTEPKVLCS IAGALHYLY LAAFTWMLLE GVHLFTARN LTVVNYSSIN  RLMKWIMFPV GYGVPATVA ISASWPHLY GTADRCWLHL DQGFMSWFLG  PVCAIFSANL VLFILVFWL KRKLSSLNSE VSTIQNTML AFKATAQLFI  LGCTWCLGLL QVGPAQAQVMA YLFTIINSLQ GFFILVYCL LSQQVQKQYQ  KWFREIVKSK SESETYTLSS KMGPDSPSE GDVFPQVKR KY  KHAYICLAAI WAYASFWTM PLVGLGDYVP EPFGTSCITLD WWLAQASVGG P  QVFILNLF CLLPTAVV FSYVKIAKV KSSSEKVAHF DSRHSHSVL EMKLTKVAML  ICAGFLIAWI PYAVVSVWSA FGRPDSIQ LSVPTLLAK SAAMYNPIY  QVIDYKFACC QTGGLKATKK KSLGFRLHT VTVRKSSAV LEIHEEV  agcgaacct cggggcgccg gggagccag ttggagcggc gggagggcgcc agcagcgc gggatgctgt ggtggggcgcc  gaaaaagcca gggcgccag ccggaggggc tccggcgccg ggttagatgg tgcacagagg gggcgggggc tgcgggagaga  caggcgagg gggggggggc cggggcgccg gcaggggccc gggagggggc ccggcgccg gggccagccc  aaggcccgga ccggggcgcc gggcggtgga ggcgtgca gggagcgggga gattgagggc agggcgccg  cgtggcgggg ctcggggga ccgctgccc ccatctct cttcttctt tccctcag ccaggaggag  ctggggggcg gggcgacca gggctgggac ccaggcttag ctggacac gggggcag ggcatacg gggcgggagc  cttagctt ttcgggagt ctccgggggt ccgggagagat gggggggccg gctgggggt caggagagct aittcgtgg  ggctccagg gaggaggcaa agcggccgga atagtcgagg gccccctgag cagccgaatg agggagctgg gattgaacac  ggcgccagc cattggcag ccgcaacga gaggacaggac agggagaccagg gtcgtgta taccggcc cagggtc  cttggcggg cggacaggac ctggcaag aggtagctg taccagggg cttgctct agggggccc ggtcggggga  acagctgccc cttcttca gactttga tccggacca cgggtcccaag ccggtgctt cccagcgga cgtgggaca  gggtcccgca aagaatggg caccggcg tctgtgggg aattatggg aacaggagac aggggtcagg gcgagagagc  cacgacatcc gggagagaaa gggagcccc ccggcggaac tgtcttca ggggtccggg atctggcccc gactggalt  cagcaccacg cagcgagg acagctctg catcagttc agcaccccc ggtctcggga cagctcccg gccggcgccc  aaggcgatgc gctccgggg tcttccg tccgcttcc cccggggcg cccggggcg cgtccccgg gactccggc  ccgtctgaa gccaggaaa taactcggc gaacggggca cgtttctg gggcgcaaa ccggccacccg cagtccggc  agtiacaacia ccagagctg ggtccgggaga atgaggcagc agggcagcg ggtctacgg tgggtgttca ggaacggac  ggcggcgagg ccggggcgt agtctctg ctggcgggcac tcaagaacag ccgctcgctg ggtgtttca gcatcgacc</p>	Homo sapiens
655	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NM_001407	<p>atcaacagcc tcaagggtt cttcaltctt ttggttactt gctctctcag ccagcaggct capaaacaat atcaaaagtg  gtttagag atcgtaaaat caaaatctga gcttgagaca tacacattt ccagcaagat ggttctdgac tcaaaaccca  gtgaggggga tgttttcca ggacaagta agagaaaaa taaactag aattatcac tccatatega aatcataic catgatctc  ttggcatia tgaagaatga agctaaaggaa aagggaattc attaaacata tcatcttgg agaggagta atcaacctt acttccaag  ctgtgttc tccaatag gcttcaaca atgtgtgtt aaattgatt tcttcaaa aaaaaa  MOGPLLLPGL CFLSLFGAV TQTKTSCAK CPNASCNN THCTCNHGYT P  SGSGQKLFTF PLETCNDINE CTPPSVYCG FNAVYNVEG SFYCQCPGY  RLHSGNEQFS NSNENTQDPT TSSKTTEGRK ELQKIVDKFE SLTNTQTLWR  TEGRQEISST ATTILRDVES KVLETALQDP EQKVLKQND SVAIETQAIT DNCSEERKTF  NLNVQMNSMD IRCSDHQD TQGPSAIAFI SYSSLGNIIN ATFFEEMDKK  DQVYLSQVV SAAIGPKRNV SLKSVTLTF QHVKMTPTSK KVFCVYWKST  GQGSQWSRDG CFLHVNKSH TMCNCSHLS FAVLMALTSQ EEDPVLTVIT  YVGLSVSLLC LLLAALIFLL CKAIONTS TS LHLQLSLCLF LAHLLFLVGI  DRTEPKVLCS IAGALHYLY LAAFTWMLLE GVHLFTARN LTVVNYSSIN  RLMKWIMFPV GYGVPATVA ISASWPHLY GTADRCWLHL DQGFMSWFLG  PVCAIFSANL VLFILVFWL KRKLSSLNSE VSTIQNTML AFKATAQLFI  LGCTWCLGLL QVGPAQAQVMA YLFTIINSLQ GFFILVYCL LSQQVQKQYQ  KWFREIVKSK SESETYTLSS KMGPDSPSE GDVFPQVKR KY  KHAYICLAAI WAYASFWTM PLVGLGDYVP EPFGTSCITLD WWLAQASVGG P  QVFILNLF CLLPTAVV FSYVKIAKV KSSSEKVAHF DSRHSHSVL EMKLTKVAML  ICAGFLIAWI PYAVVSVWSA FGRPDSIQ LSVPTLLAK SAAMYNPIY  QVIDYKFACC QTGGLKATKK KSLGFRLHT VTVRKSSAV LEIHEEV  agcgaacct cggggcgccg gggagccag ttggagcggc gggagggcgcc agcagcgc gggatgctgt ggtggggcgcc  gaaaaagcca gggcgccag ccggaggggc tccggcgccg ggttagatgg tgcacagagg gggcgggggc tgcgggagaga  caggcgagg gggggggggc cggggcgccg gcaggggccc gggagggggc ccggcgccg gggccagccc  aaggcccgga ccggggcgcc gggcggtgga ggcgtgca gggagcgggga gattgagggc agggcgccg  cgtggcgggg ctcggggga ccgctgccc ccatctct cttcttctt tccctcag ccaggaggag  ctggggggcg gggcgacca gggctgggac ccaggcttag ctggacac gggggcag ggcatacg gggcgggagc  cttagctt ttcgggagt ctccgggggt ccgggagagat gggggggccg gctgggggt caggagagct aittcgtgg  ggctccagg gaggaggcaa agcggccgga atagtcgagg gccccctgag cagccgaatg agggagctgg gattgaacac  ggcgccagc cattggcag ccgcaacga gaggacaggac agggagaccagg gtcgtgta taccggcc cagggtc  cttggcggg cggacaggac ctggcaag aggtagctg taccagggg cttgctct agggggccc ggtcggggga  acagctgccc cttcttca gactttga tccggacca cgggtcccaag ccggtgctt cccagcgga cgtgggaca  gggtcccgca aagaatggg caccggcg tctgtgggg aattatggg aacaggagac aggggtcagg gcgagagagc  cacgacatcc gggagagaaa gggagcccc ccggcggaac tgtcttca ggggtccggg atctggcccc gactggalt  cagcaccacg cagcgagg acagctctg catcagttc agcaccccc ggtctcggga cagctcccg gccggcgccc  aaggcgatgc gctccgggg tcttccg tccgcttcc cccggggcg cccggggcg cgtccccgg gactccggc  ccgtctgaa gccaggaaa taactcggc gaacggggca cgtttctg gggcgcaaa ccggccacccg cagtccggc  agtiacaacia ccagagctg ggtccgggaga atgaggcagc agggcagcg ggtctacgg tgggtgttca ggaacggac  ggcggcgagg ccggggcgt agtctctg ctggcgggcac tcaagaacag ccgctcgctg ggtgtttca gcatcgacc</p>	Homo sapiens

[illegible]



[illegible]

[illegible]

656	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	gcaaaaggag cagaacaag ggaattcaag accagaatg taggtgccac tgcctctat gtttacagga tctccgtgg ccctaggcac ctgggtgca ggaagtact ccgttcact cctcttat tccctaaag agggaaaaat gactgttac accctgtca caaaacttt actttgtca ttgtctgc tgcctgaac tgaagactt aaaaatttgt tactgtttac aagtcacgat tcaaaaaatg tttttactt gtttacaact caaaacttg agttttacac ttgtttaca gtatataat tttttctt tttttcaag tgaaggtag ggaaggagg agaggactt ggagagcca cctgtgagga ccttgacctg gccatcttga ggggtttct aaaccocagg tctccaggc cgaaggtcag ccttgatcc cgtttacag cagatccaga agaccttgag agtaggcgtc ctctaacac gggggagagt ggcgtgtag ggcgtggggg tggctgtgc agacacctc tcaccacca cccatgcat actctggga agcagcttc tgggagatt gaaattctac ttccigtact ggagctaat cccaccagcc agggccaaa ctctcttac cgagaaggac ccagcttt gaagggtcga gtggccctgt ggggggggga ggggtgtt actatgctt agggttcgt gatccccc tctggggtc cctctcca gcccagggc ccttttct gtcgtgtaa atgttcgt gaagccggc tctgtttg gaataacti ctalagaaa caaaa MMARRPPWRG LGERSTPILL LLLSLFPLS QEELGGGQH QWDPGLAATT GPRAHIGGCA LALCPSSGV REDGGPLGV REPfVGLRG RRQSARNSRG PPEQPNEELG IEHGVPPLGS RERETGQPG SVLYWRPEVS SCGRTGPLQR GSLSPGALSS GVPGSGNSSP LPSEDFLRHH GPKPVSSQRN AGTGRKRVG TARCCGELWA TGSKGQGERA TTSGAERTAP RRNCLPGASG SGPELDSAPR TARTAPASGS APRESRTAPE PAPKRMRSRG LFRCRFLPQR PGRPPGLPA RPEARVTSANRRARFRRAAN RHPOFPQVNY QTLVPENEA GTAVLRVVAQ DPDAGEAGRL VYSLAALMNS RSELFSDP QSLIRTAALDRESMERHY LRVTAQDHGS PRLSATTMVA VTVADRNDHS PVFEQAQYRE TLRENVEEGY PILQLRATDG DAPPANLRY RFVGPPAARA AAAAFEIDP RSLISTSGR VDREHMESE LVVEASDQGG EPGRSATVR VHTVLDEND NAPISEKRY VAQVREDVRP HTVVLVRTAT DRDKDANGLV HYNISGNSR GHFAIDSLTG EIQVVAPLDF EAEREYALRI RAQDAGRPL SNNTGLASIQ VVDINDHIPI FVSTPFQVSV LENAPLGHV IHQAVDADH GENARLEYSL TGVAPDTPFV INSATGWVSV SGPLDRESVE HYFFGVEARD HGSPPLSASA SVTVTVLDVN DNRPEFTMKE YHLRLNEDAA VGTSVSVTA VDRDANSAS YQITGGNTRN RFAISTQGGV GLVTLALPLD YKQERYFKLV LTASDRALHD HCYVHINTD ANTHRPVFQS AHYSVSVNED RPMGSTIVI SASDDDVGEN ARITYLLEDN LPQFRIDADS GAITLQAPLD YEDQVYTLA ITARDNGIPQ KADTTYVEVM VNDVNDNAPQ FVASHYTGLV SEDAPPFTSV LQISATDRDA HANGRVQYTF QNGEDGDGDF TIEPTSGIVR TVRRLDREAV SVYELTAYAV DRGVPLRTP VSIQVMVQDV NDNAPVFPAE EFEVRVKENS IVGSVVAQIT A VDPDEGPNH HIMYQIVEGN IPELFQMDIF SGELTALIDL DYEARQEYVI VQATSAPLV SRATVHVRLV DQNDNSPVLN NFQILFNNYV SNRSDTFPSG IGRIPAYDP DVSDHLFSF ERGNELQLLV VNQTSSELRL SRKLDNNRPL VASMLVTVID GLHSVTAQCV LRVVIITEEL LANSLTVRLE NMWQERFLSP LLGRFLEGVA AVLATPAEDV FIFNIQNDTD VGGTVLNVSF SALAPRGAGA GAAGPWFSSE ELQEQLYVRR AALAARSLD VLPFDDNVCL REPCENYMKC VSVLRFDSSA PFLASASTLF RPIQPIAGLR CRCPPGFTGD FCETELDLCT SNPCRNGGAC ARREGGYTCV	P	Homo sapiens
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QVRLTYST GESNTVVSP TVPGLSDGQW HTVHLRYNK  
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ANNQDPALTSGDETSLGRAQRQKGIKNRLQYPLV  
RAATLGRHAPVPAASYGRIYAGGGTGSLSQPASRYSSRE  
ERLEEAPAVLRPLSRPGSQECMDAAPGRLEPKDRGST  
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DPLPSRPDLSLSRSSNSREQLDQVPSRHPSREALGPLQOLLAREDS  
LDLSSILASFNSALSSVQSSSTPLGPHTTATPSATA SVLGPSTPRS  
EVPRSEGHS  
cca gctcccaac agcagttggc cccaagica gaattggact aacactagg ccaacccggc  
t cctactatca gcacacctcc ccgtggcgg ccatgtcat tgggctat gcgtctctg  
tgg tctgttcat cgtgctcaag aacccggcaca tgcatactgt caccaacatg ttactctca

A Homo sapiens

658	193914	Neuropeptide FF 1 Receptor	NP_071429.1		<p> acctggctgt cagtgaactgt ctgggtgggca tttctgcat gccaccacc cttgtggaca acctatcac tgggtggccc  ttcgacaatg ccacatgcaa gattgagcggc ttgtgacagg gcatgtctgt gtgcgcttcc gttttacac tgggtggccat  tgcgtggaa aggttccgt gcatcgca ccccttccg gagaagtcta ccttgggaa ggcgtcgt accatggccg  tcatctgggc cctggcgtgt ctaicatgt gtccctggc cgtacgtgt accgtaccc gtgaggagca ccactcatg  gtggacggcc gcaaccgtc ctaccctc tactctgt gggaggccgt gcccggagag ggcaltcgca gggcttacac  cactgtctc ttctgcaca ttaactggc gccgtggcg ctaicgtgg taltgtacg ccgcaicggc cgtcaagctct  ggcaggcccc gggccggcg cccggggcg agagggctgc ggaaccggga gcatcgggc gcagagcggc cgtgtgtgac  altgtgtgca tgggtggct gttttacg cgtctcggc tgcctgtct gggcgtgt cgtctacg actacgggca  gtcagcggc ccgcaicgtgc acctgtgac cgtctacg ttcccttg cgcactgggt ggcctcttc aacagcagcg  ccaacccat cactacggc tactaacg agaacttcg ccggcgcttc caggccggct tccggggccg cctctggccc  cgccgtcgg ggaagccaaa ggaaggctac tccagcggc ccggcggcg tctgcacagg cggcgttcg tgggtgtgcg  ggccagcag tccggcgtc cctctgagc gggccctagc agtggggcg ccaggggcg ccgctcccg ctgaggatc tga  ggcgggtggc tcaccagcg tgcacagg agggcgtg cgtctccac cgtccctca ccatcagc ctaggatac tga  MEGEPSPQPN SSWPLSQNGT NTEATPATNL TFSSYYQHTS PVAAMFIVAY  ALFLLCMVG NTLVCFVLK NRHMTVTNM FILNLAVSDL LVGFCMPTT  LVDNLITGWP FDNATCKMSG LVQGMVSAS VFTLVAIA VE RFRCIVHPFR  EKLTLRKALV TIAVIWALAL LIMCPSAVTL TVTREEHHFM VDARNRSYPL  YSCWEAWPEK GMRRVYTTVL FSHYLAPLA LIVVMYARIA RKLCOAPGPA  PGEEEAADPR ASRRRARVVH MLVMVALFFT LSWLPLWALL LLIDYGQLSA  POLHLVTVA FPFHWLAFF NSSANPIY YFNENFRRGF QAAFRARLCP  RPSGSHKEY Y SERPGGLLHR RVFVVVRPSD SGLPSESGPS SGAPRPGRLP  LRNGRVAHHG LPREGPGCSH LPLTIPAWDI  agatactgt actttctc caaacagcat aagaagtgt tgaaccaca gatactgaa ggaagggtc cctcaggtg  tgggtgaag agataatca ccagtcacag actatgacc cagctgtcgt tgtcagc agggaaaaag aaggtggag  tgcgtgggt cattcttc ttaccttca ctgacggcca cgggtggctc ctggggaaaa atgatacat caaaacaaaa  aaagaactca tigtgaataa gaaaaaacat ctaggccag tgaagaata tcaagctgt cttcaggtga cctatagaga  ttccaaggag aaaaagagatt tgaagaatt tctgaagctc ttgaagcctc cattattgt gtcacatggg ctatitaga ttatcagagc  aaaaggctacc acagactgca acagcctgaa tggagctcgt caggttacct gtagagacag ctacacctgg ttcttccct  caltgcttga tcccagaac tctacttc acaggtcgt agctctcca agctgtgaaat gtaicicaa caacctcagc  cagaagtga attctgtga gagaacaaag atttggggca cttcaaaat taatgaagaag ttacaaatg acctttgaa ttactctc  gtatatact ccaaatatgc aaatggaatt gaaitcaac taaaaaagc alatgaaga attcaaggt ttgagtcgt ttaggtcacc  caatttcgaa tgcactct gtgcgccaa tggagtgca alggcacaat ctaggctcac tgaacctgt caacctgtc  ctaccgggt caagagatc cctgtctca gctcccaag tagcttgaat tacaaggcacc tgcaccaca tccagctaac tttttgta  ttttttag agacaggggt tcaacalgt ggccacatg gtctaaact cctgactca ggtgatccg cgtctcggc  ccccaaagt cgtgattac aggcaltgac caccacatct ggcctaggag cttaaatatt ggaagcaltc ctcaaaactg  tgggtcagtg agtagaacta caaacataa gcagttagggc agaaactga aagaaggcag gatacattg tgcagtggga  tgggaaaaag tgaagggtt ggaaggggt tgcgggtgt cgaagggtt attttcct tcaagcaacta caggagatal  galtcctcat aattcggagc cagaagtggt gcttgggtg agatactt gcacagataa catgtataca tcalagttca  aaaccagta gtcattgtt acagcaata aagaatatt tagtaattt aaaaaaaa aaaaaaaa aaaaaaaa  aaaaaaa aaa </p>	P	Homo sapiens
659	194319	G Protein-Coupled Receptor FLJ22684	NM_025048		<p> agatactgt actttctc caaacagcat aagaagtgt tgaaccaca gatactgaa ggaagggtc cctcaggtg  tgggtgaag agataatca ccagtcacag actatgacc cagctgtcgt tgtcagc agggaaaaag aaggtggag  tgcgtgggt cattcttc ttaccttca ctgacggcca cgggtggctc ctggggaaaa atgatacat caaaacaaaa  aaagaactca tigtgaataa gaaaaaacat ctaggccag tgaagaata tcaagctgt cttcaggtga cctatagaga  ttccaaggag aaaaagagatt tgaagaatt tctgaagctc ttgaagcctc cattattgt gtcacatggg ctatitaga ttatcagagc  aaaaggctacc acagactgca acagcctgaa tggagctcgt caggttacct gtagagacag ctacacctgg ttcttccct  caltgcttga tcccagaac tctacttc acaggtcgt agctctcca agctgtgaaat gtaicicaa caacctcagc  cagaagtga attctgtga gagaacaaag atttggggca cttcaaaat taatgaagaag ttacaaatg acctttgaa ttactctc  gtatatact ccaaatatgc aaatggaatt gaaitcaac taaaaaagc alatgaaga attcaaggt ttgagtcgt ttaggtcacc  caatttcgaa tgcactct gtgcgccaa tggagtgca alggcacaat ctaggctcac tgaacctgt caacctgtc  ctaccgggt caagagatc cctgtctca gctcccaag tagcttgaat tacaaggcacc tgcaccaca tccagctaac tttttgta  ttttttag agacaggggt tcaacalgt ggccacatg gtctaaact cctgactca ggtgatccg cgtctcggc  ccccaaagt cgtgattac aggcaltgac caccacatct ggcctaggag cttaaatatt ggaagcaltc ctcaaaactg  tgggtcagtg agtagaacta caaacataa gcagttagggc agaaactga aagaaggcag gatacattg tgcagtggga  tgggaaaaag tgaagggtt ggaaggggt tgcgggtgt cgaagggtt attttcct tcaagcaacta caggagatal  galtcctcat aattcggagc cagaagtggt gcttgggtg agatactt gcacagataa catgtataca tcalagttca  aaaccagta gtcattgtt acagcaata aagaatatt tagtaattt aaaaaaaa aaaaaaaa aaaaaaaa  aaaaaaa aaa </p>	A	Homo sapiens

660	194319	G Protein- Coupled Receptor FLJ22684	NP_079324.1	MKVGVLWLIS FFTFTDGHGG FLGKNDDIKT KKLIVNKKK HLGPEVEYQL LLQVTRYDSK EKRDRLNFKL LKPPLLWSH GLIRIRAKA TTDCNSLNGV LQCTCEDSYT WFPSCLDPO NCYLHTAGAL PSCECHLNNL SQSVNFCERT KIWGTFKINE RFTNDLLNSS SAIYSKYANG IEIQLKKAYE RIQGFESVQV TQFRMSLLSP KLECNGTI	P	Homo sapiens
661	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NM_030774	atgagttctt gcaacttacc aatgocacc ttgtgctta ttgttatccc aggtatagag aaagoccat ttgggttgg cttccccctc ctttcatgt atgtatggc aatgtttgga aactgcatcg tggcttcat cgttaagcagc gaacgagoc tgcacgctoc gatatacct ttctctgca tgcctgagc catgacacg gottatcca catcacat gottaaagtc ctggccctt ttgtgttga ttcccgagag attagcttgg aggcctgtct taccagatg ttctttatc atgcctctc agccattgaa tccacatcc ttgtggccat ggcctttgac cgttatggg ccacttgcc cccactgagc catgctgagc tgcatacaa tacaataca gcccagattg gcatcgtggc tgtgtccgc ggatccctt ttitttccc actgctctg ctagcaagc ggctggcctt ctagccatcc aatgctctc cgcatctcta ttgtgtccac caggatgaa tgaagtggc ctagcagac acttgoccca atgttgata tggcttact ggcattctgc tggctatggg cgtggagcgt atgttactt cctgtctta ttctgata atagcaacgg ttctgcaact gcttocaag tcaagcggg ccaaggcctt tggaaacctgt ggtcacaca ttgtgtgtgt actgcttc taltggccac ttatggcct ctagtgtta caccgcttg gaaacagcct tcatccatt gtgcgttg tcaagggtga catctaccg ctgctgctc ctgtatcaa tccatcatc tatgggtcca aaacaaaca gatcagaaca cgggtgctgg ctagtcaa gatcagctg gacaaggact tgaaggctg gggaggcgaag tga MSSCNFTTHAT FVLIGIPGLE KAHFWVGFL LSMYVVMFNG NCIVFVIRT	P	Homo sapiens
662	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	ERSLHAPMYL FLCMLAIDL ALSTSTMPKI LALFWFDSRE ISFEACLTM FFIHALSAIE STILLAMAFD RYVAICHPLR HAAVLNNTVT AQIGIVAVVR GSLFFFLPL LIKRLAFCHS NVLSHSCVH QDVMKLAAYAD TLPNVYGLT ALLVMGV DV MFISLSYFLI RTVLQLPSK SERAKAFGTC VSHGVVLF YVPLIGLSVV HRFNGSLHPI VRVVMGDIYL LLPVINPII YGAKTKQIRT RVLAMFKISC DKDLQAVGKK actttttca tctctctt ggtgtagga tgaagaaat gaaagcagc tatcacct ttataggag atcaaacg catctactg gattagctc aaagtctta aatatcaaa acatccatc gacagatcac tgaaggagg actgtttt ctgttttga atagtccg attaaactt ttatgctcaag aagaanaagaa gctagtatt tctaccacg ggtgtgtgtt ggtgtgttc ttaccatgg cttctgccc tgcctgggaac ctatgggtgc tgggtgctgt cgtgtgtgga ctactgacg gcatcatitt gggactgggc atctggagga ttgtgtacag gatccaaaga ggaataatcta ctctctalc aagcaccct acagagtct gcaaggaaagg tggaaacctgg gaaatggca gatgtattg tacagaagag tggaaaggac tgaagtgtac aatgtcta ttgtgaaa atagtacct tatgggttt acttttgcca gaatccagat gggcagatat ggacatct tgcataacag tggcaaggat actccaaatg cgggcaatcc aatggcagtc cgtgtgtgca gtcctctc atatggagag atagaaat tgcataac aaaaatgac aataggaaat tgcataa atctggaaac cctggaaag caggtagagg atgtcacagc accattat aacattct ctgaagtcca gattttaca tctgatcca alaaatlaac tgcitagaac atactatg ctacggaggt ggttggacag atattcaaca ctccagaaa tgcctacat gggcaaga aagtgtccat agtaacatg agtcaactc tagatgccag tgaagtgt ttcaagag ttgctgtac tgcataat gatgccctta caactttat tgaagcaatg pagattatt cctgtttt gggtaataca tcagtgtgtg aacctaat agcaatcac tgaacaatt tctttcaga aaatcggtg gggcttcaa atgttctt ctgtgtcag aaaggagcta gcatctct agtttcagt tcaactta tatalacaaa tggatggc cttaacccag atgcacagc tgaatcag gctgtctta atatgacgaa aaattacac aagacatgg cttttgtgt ttatcaaat gacaagctt tccaataa aactttaca gctaaatcgg attttgca aaaaattac tcaagcaaaa ctgatgaaa tgaagcaagat cagagtgct ctgtgacat ggtctttagt ccaaatgata accaaaaaga attcaactc tatctatg cctgtgtc ttggatgg tgaagcagg actgggacac atagtgcgt caaaaagaca aggcactga tggattctc cgtgtccgt gcaacatc tactaattt gctgtattaa tgaatttcaa aaaggattat caatatoca	A	Homo sapiens
663	194743	FLJ14454	NM_032787		A	Homo sapiens

[illegible]

666	194745	G Protein- Coupled Receptor SLT/MCH2	NP_115892.1	<p>aaccatttgc actgacacgt tggagaacaa ggtaacaagc catcggatc aatttgggoc ttiggcgagc ttctttatc ctggcattgc ctgtctgggt ctactgaag gtaacaaat ttaagacagg tgttgagagt tggctttg atttgacatc ccttgacgat gtactctgt atacactta ttgacgata acaactttt ttcttcctt acccttgatt ttgggtgct atatttaatt ttatgctat acttgggaga tgaataca gaataaggat gccagatgct gcaatccag tgaatacaaa cagaragiga tgaagtigac aaagatggg ctgggtctgg tggtagtct tctctgagt gcctggccctt acaactgcat acaactggg aacttacaga tggaaagoc cacactggc ttctatggg gttatctt cttcatctgt ctacgtatg ccagcagcag caataacct ttctctaca tctgtctgag tggaaattc cagaacatgc tgcctcaat ccaagaaga ggcactgaga aggaatacaa caatatggga aacactctga aatcacact ttaggaaagt acatgata ccatgagct agacatgatt gctatctta ctggatatt tagaaaggcg aggtgacag atagtttat gccattct ctgtgtact tggactctt agcagcatgg aagaagagtg taaccatgca aatacaatga gcttaataig ctaactgaa aaaaaaaa aaaaaaaa</p>	Homo sapiens
667	194756	Chemokine Receptor FKSG80/GPR81	NM_032554	<p>MNPFHASCWN TSAELNKSX NKEFAYQTAS VVDTVLPSM IGIICSTGLV GNILIVFTII P RSRKKTVPDI YICNLAVADL VHIVGMPFLI HQWARGGEWV FGGPLCTIIT SLDTCNQFAC SAIMTVMSVD RYFALVQFPR LTRWRTRYKT IRNLGLWAA SFILALPVWV YSKVIKFDG VESCAFDLTS PDDVLWYLY LTTITFFPL PLLVCYLI LCYTWEMYQQ NKDARCCNPS VPKQXVMKLT KMLVLVVVF ILSAAPYHVI QLVNLQMEQP TLAFYVGYL SICLSYASS INPFLYLLS GNFQKRLPQI QRRATEKEIN NMGNTLKSXF</p>	Homo sapiens
668	194756	Chemokine Receptor FKSG80/GPR81	NP_115943.1	<p>ccacacacac aggaaccca tcttgggiga tgaagtcaga cagcagcag ctgggtgagt gctaagctc agataagcat ctgtgcaatt gggggactc cctggcgctc tctgcacccg gactctgt ctgtcccgcc catgtacaac gggctgtgt ggcgcatga gggggacac atctccagg tgaiccgcc gctgtccat gggcgcttg tctggcgcc actaggcaat gggtcgccc tgtgtggtt ctgtctcac atgaagacct ggaagccag cactgttac ctctcaatt tggcggtggc tgaattctc ctatgatct gctgctt tgggacagc tatctcca gacgtagaca ctggctttt ggggacalc cctgcggagt ggggtcttc acgttggcca tgaacaggc cgggggcalc ggttctta cgggtgtggc tggggacagg tatctcaag tgggtcaccc ccaccacgg gigaacacia tctccaccg ggtggcggtt ggcactgct gcaccctgg ggcctggc atcctgggaa cagtgtact ttgtctggag aacctctt gcgtgcaaga gacggcgctc tctgtgaga gcttcatat ggaagcggc aalggtctgc atgacatcat gttocagctg gacttctta tggccctcgg catcatcta ttgtctct tcaagatgt ttggagcctg aggcgaggc agcagctggc cagacaggct cggatgaaga agggaccccg gttatcatg gttgggcaa ttgtgtcat cacatgtac ctggcagcg tctgtctag acttatttc ctctggacgg tggcccgag tgcctggat cctctgtcc atggggcct gcataaac ctacgtcca ctacatgaa cagcatgct gttccctgg gttccctgg tgaatttt ttaagcccc tctttcca aatctaca caagctcaaa atctgcagc tgaacccaa gacggcagg cactcaaaa cacaaggcc ggaagagatg ccaatttga acctggcg caggagtgc atcagtgtgg caaatgtt ccaagccag tctgatggc aatgggatoc ccacattgt ggtgtggcact gaacaagcag accaaca ctagggaaga tagagtggc actagaalt aactgtgt aagggtcgg gggcttga aatgccacc cctttctta ttgaagagc gctctcga catgaactg atctctca ttctgtgga aatgaattc acacaact accttggg gaggttcag tt</p>	Homo sapiens



[illegible]

671	194858	G Protein-Coupled Receptor LS194858	LG94710	QGLFIFLHC LLNSEVRAAF KHKTKVWSLT SSSARTSNAK PFHSDLMNGT RPGMASTKLS PWDKSSSAH RVDLSAV ttagttcaag tcaaggtcga cactgttgg gctgttggg tggtaggcaa tcttggggcc gggagctgtcc cgggagggctc ttccocacag ccccttcagg cactttggg cggctgacct ccaagggggct ggttagcgct gatgcocacg cccatgggt acggggcactg ccgttgcact ggcacttct agggagagaga gggacaacag tgcocaggc cccagtggcg gggcgtgctc ataggccagg actgagaga gcatgtgtggc cactgtggc cccagcaca gcccgagagag cagcatggct cccagctgtg cccttgctg cctccaggta agggccggg ccaggccggg gggctatcg gggacacatg cccgtccag ccggcagatg tcttcagct gggcgtggg agtggccag acgggacag agagagagag agcagcacc acggcgggca gcaaggagcc atagacttgg aggtacaggt agggggctgg gaagatagcc tgggagctg agtggcacc agggggccag tggttcacc ccagagggg cagactggca aagagcaggg gacagccca ggtgagagag agggccagcc gaatgctccc aggggggctgg agtggccca ggcactgcat gtatgctcc ccgtgacca gcaagaggtt ggcagcagg gagagagag agaatgtggg agccaagtat cggaggaggc aggaacagta acccgccga cttgtgtcc acagccctgg caatgtggg aatgocagac ccgtgagcag ccagccagc agtaggcta ggaagagaga gccagcaggt gggcgtggca gggcggggc caggcgtatg ccagggcta gggcaggt cgggtgag atgaggttg ccaggccag gggagggccc aagggccct tgggaatggg gttggcacc tggcagctc tgggggct cactgttc cttgggacag gggagcttg gaggggcag cggcatg QDTRHGNRC RAGCSNLT RKAQAGQAP APNSHACRLP LQDSPVPRTK MTPNSTGEVP SPIPGALGL SLALSLIT ANLLALGIA GTAAACAATCW LLLPEPTAGW AAHSGIATL PGLWNQSRG YWSCLLVLA PNFSLSLLA NLLLVHGERY MAVLRPLQPP GSIRLALLT WAGPLFASL PALGWNHWTP GANCSSQAF PAPYLYLEVY GLLLPVAGAA AFLSVRLAT AHRQLQDICR LERAVCRDEP SALARALTWR QARAQAGAML LFLCWGPYV ATLLSVLAY EQRPPLPGT LLSLLSLGSA SAAAVPVAMG LGDQRYTAPW RQPPKGACRG CGEPPGTVP APALPTTQAA KAVSTWT tggggccag gatagtaga tcaagggtc cagagcactg gctagttag ggggggtt ttagcttaa tgtattccc atgttagcac agaatgtg tggcagtaga gagggtcag gctcagag cagcaagaac tggatticaa actggatttg aggacoccca cctttgata gggactat tctgttag tctgtatc gcccttita aatgaggaag taaatccac atggcagggt ggtagggaga atcagagatc atacagctgg tgalcacaac tggttctgt ttccagggtc accagactgg ggtttctgag catggatca accatccag tcttgggtac agaatgaca ccaatcaac gacgtgagga gactcttgc tacaagcaga ccctgagct cagggggctg acgtgcatg ttctctgt cggcgtgaca ggaacggg tttgtctg gctcgtggg tggcgtatg gcaaggacgc tgttccatc tacaotca accgtgctg gggcgtc cttctctia gggggccat tatatgtc ccgttacc gccatcat ccgccatccc atctcaaaa tctcagacc tttctact ttataggct aagcatgctg agggccatca gcaaggagc gctcgttcc atctgtggc ccatggga ccagtcgc cggccagat accgtcatc gggtcatgt gcttctct gggccctgc cctgtcgg agtatctgg agtggatgt cgtgtact cgtttatg gtcgtatc tgtttgtt gaaacgtcag attcatlac aatcggtgg cttgtttt tatgttgg tctgttgg tcaagctgg tctgttgg caggatctc ttttggatcc ggaagatgcc gctgaccagg cttgtaga ccaotctct cagactgt gcttctcc tctgtggct gcccttggc attcagttgg cccttttc caggatccac cttgattgga agcttatt tttcatgt catctagt ccatttct gctcgtct aacagcagtt ccaacccat catttttc ttgttgggt cttttaggga ggcgtcaaat aggcagaac tgaagctgt tctccagag gcttgcagg acacgccga ggttggatga ggttgggggt ggttcttca ggaacccgt gagctgtcgg gaagcagat ggaagcagta ggaagaact cgtccctgc agacagagact ttgagagaa tgcgtccctg ccaccttga caattatg caatttct agcctctgc ctcaagaatg	A	Homo sapiens
672	194858	G Protein-Coupled Receptor LS194858	ENSP00000053 533	QDTRHGNRC RAGCSNLT RKAQAGQAP APNSHACRLP LQDSPVPRTK MTPNSTGEVP SPIPGALGL SLALSLIT ANLLALGIA GTAAACAATCW LLLPEPTAGW AAHSGIATL PGLWNQSRG YWSCLLVLA PNFSLSLLA NLLLVHGERY MAVLRPLQPP GSIRLALLT WAGPLFASL PALGWNHWTP GANCSSQAF PAPYLYLEVY GLLLPVAGAA AFLSVRLAT AHRQLQDICR LERAVCRDEP SALARALTWR QARAQAGAML LFLCWGPYV ATLLSVLAY EQRPPLPGT LLSLLSLGSA SAAAVPVAMG LGDQRYTAPW RQPPKGACRG CGEPPGTVP APALPTTQAA KAVSTWT tggggccag gatagtaga tcaagggtc cagagcactg gctagttag ggggggtt ttagcttaa tgtattccc atgttagcac agaatgtg tggcagtaga gagggtcag gctcagag cagcaagaac tggatticaa actggatttg aggacoccca cctttgata gggactat tctgttag tctgtatc gcccttita aatgaggaag taaatccac atggcagggt ggtagggaga atcagagatc atacagctgg tgalcacaac tggttctgt ttccagggtc accagactgg ggtttctgag catggatca accatccag tcttgggtac agaatgaca ccaatcaac gacgtgagga gactcttgc tacaagcaga ccctgagct cagggggctg acgtgcatg ttctctgt cggcgtgaca ggaacggg tttgtctg gctcgtggg tggcgtatg gcaaggacgc tgttccatc tacaotca accgtgctg gggcgtc cttctctia gggggccat tatatgtc ccgttacc gccatcat ccgccatccc atctcaaaa tctcagacc tttctact ttataggct aagcatgctg agggccatca gcaaggagc gctcgttcc atctgtggc ccatggga ccagtcgc cggccagat accgtcatc gggtcatgt gcttctct gggccctgc cctgtcgg agtatctgg agtggatgt cgtgtact cgtttatg gtcgtatc tgtttgtt gaaacgtcag attcatlac aatcggtgg cttgtttt tatgttgg tctgttgg tcaagctgg tctgttgg caggatctc ttttggatcc ggaagatgcc gctgaccagg cttgtaga ccaotctct cagactgt gcttctcc tctgtggct gcccttggc attcagttgg cccttttc caggatccac cttgattgga agcttatt tttcatgt catctagt ccatttct gctcgtct aacagcagtt ccaacccat catttttc ttgttgggt cttttaggga ggcgtcaaat aggcagaac tgaagctgt tctccagag gcttgcagg acacgccga ggttggatga ggttgggggt ggttcttca ggaacccgt gagctgtcgg gaagcagat ggaagcagta ggaagaact cgtccctgc agacagagact ttgagagaa tgcgtccctg ccaccttga caattatg caatttct agcctctgc ctcaagaatg	P	Homo sapiens
673	194878	MrgX3 G Protein-Coupled Receptor	AY042215	tggggccag gatagtaga tcaagggtc cagagcactg gctagttag ggggggtt ttagcttaa tgtattccc atgttagcac agaatgtg tggcagtaga gagggtcag gctcagag cagcaagaac tggatticaa actggatttg aggacoccca cctttgata gggactat tctgttag tctgtatc gcccttita aatgaggaag taaatccac atggcagggt ggtagggaga atcagagatc atacagctgg tgalcacaac tggttctgt ttccagggtc accagactgg ggtttctgag catggatca accatccag tcttgggtac agaatgaca ccaatcaac gacgtgagga gactcttgc tacaagcaga ccctgagct cagggggctg acgtgcatg ttctctgt cggcgtgaca ggaacggg tttgtctg gctcgtggg tggcgtatg gcaaggacgc tgttccatc tacaotca accgtgctg gggcgtc cttctctia gggggccat tatatgtc ccgttacc gccatcat ccgccatccc atctcaaaa tctcagacc tttctact ttataggct aagcatgctg agggccatca gcaaggagc gctcgttcc atctgtggc ccatggga ccagtcgc cggccagat accgtcatc gggtcatgt gcttctct gggccctgc cctgtcgg agtatctgg agtggatgt cgtgtact cgtttatg gtcgtatc tgtttgtt gaaacgtcag attcatlac aatcggtgg cttgtttt tatgttgg tctgttgg tcaagctgg tctgttgg caggatctc ttttggatcc ggaagatgcc gctgaccagg cttgtaga ccaotctct cagactgt gcttctcc tctgtggct gcccttggc attcagttgg cccttttc caggatccac cttgattgga agcttatt tttcatgt catctagt ccatttct gctcgtct aacagcagtt ccaacccat catttttc ttgttgggt cttttaggga ggcgtcaaat aggcagaac tgaagctgt tctccagag gcttgcagg acacgccga ggttggatga ggttgggggt ggttcttca ggaacccgt gagctgtcgg gaagcagat ggaagcagta ggaagaact cgtccctgc agacagagact ttgagagaa tgcgtccctg ccaccttga caattatg caatttct agcctctgc ctcaagaatg	A	Homo sapiens

674	194878	MrgX3 G Protein-Coupled Receptor	AAK91806.1	MDSTIPVLGT ELTPINGREE TPCYKQTL SF TGLTCIVSLV ALTGNAVVLW LLGCRMRRNA VSIYILNLVA ADFLFLSGHI ICSPRLINI RHPISKILSP VMTPPYFIGL SMLSIASTER CLSILWPIWY HCRPRYLSS VMCVLLWALS LLRSILEWMF CDFLFGADS VWCETSDFIT IAWLVFLCVV LCGSSLLVLLV RILCGSRKMP LTRLVYVITLL TVLVFLLCGL PFGIQWALFS RIHLDWKVLF CHVHLVSIFL SALNSSANPI IYFFVGSFRQ QONRQNLKL V LQRALQDTP EDEGGGWLPQ ETLESGSRL EQ	P	Homo sapiens
675	194903	G Protein- Coupled Receptor GPCRB3	LG100657	tcaggfegag ccgcagcgcc tcfgtiagc ctagaagfag ggcctggaagt gctctigtct gttgagggctt gggcggcgaga ggatcacgta gactatggc agaaataacc caccgaagcc gctgctcagc ctagctagcc cagccatcat gttggccggca ggcaggactt tgcctgctga gacgctggcc gttgtgtaaga aggcgatacca ggcacaggaag ttgaagagca ggcctgaaggt gacacattg ggcctgtgt agtctcttgc caagtctta cccaggtiagc tgcacgtgcaa ggcactgtatg gtagagggagc catgttagag gaaggccagt atgaagccca gggaggttgggt cctgtgtcac tcaagcatca ccgattggggg gaaagcgttgg tatctctag caggcagttgg ggtccacacc accagccaag ttgagacagt aagcagctgg ggcgtgtgagc tgaatcac aaacaggcca gcacgttgg ttggaccoca ggcgtgtgtag aaltgtaggtia ctttgggtga aaactgtgaag atgtatgatta gttggaaatga ggcgaactgc aggcaggaca gtagaagttgt' gaaaccaagg gcaagagaggc ccttggcgtgtag caagcacgca ggccttgttgg gttcccaaaa gaaagccatag aggtctgcccac taccctgttc cagggtagccc agcataaagaa agcacaggccg gccccctgtct gacttcacca cagggggtgtc taggtgtccag gcaaacaggc cagcagttccc aagcagcagc agcagcagca gctgtgttagc tgcacagcgc acccaagagg tgtgtctacg caaagccaaaa aacaccacag tgcgcggggaa gcaaggcttgg cttccctcag gttcccatc ttcttcca caaggctggc atctgttagg gctgtgaaagg gaaaggccaag aaggttctctg agagccagat gtagcagat gtagaagaa ataggggccct gcaagtagat gtagaagttg taccaggggca gctagactat actaggcata gtgggtatggg gtagagccgg agtggggccct gtagggccagc atttccaa aatgctgtg ttaattacag actgtgaga cacacaggc ggtctgtat ggtctatgat cccatgagggc ttgtcaaac cctaggggagc acctaacct ggttagctctg cccacatacc agaaaggtta cgtatgtatg gtagcagcct gcttcccaagg gtagggcattg taaacctct ctcttgccag catctcatg aaccattc ctgggtctgt gctgtgtgt ttcttgtgt cctggaccct tgaaggacaga agggaaagtat tccgtccct acagagatgg tgaaggaa gaaatggcc cctgggacac aactaaggac ctgagttctt agtactaa ttgtctct gttctgacc ttgattct gtaggggaa tgcgtttt ttctgtctg cagcacacgt agtactgtia ttacaggcca gctgttcaag gtagctagctg tcttggcat gggcaacaga agggagacgtla gtagaaggag gcaacaagg gcaaatagct atattcattt agagaaagag gttgaatca ggtatagct gctttgtag gtagttgtat gtagctctc taaacagagg caccctcag tctaaaggct tcagttggct aattctt ttcttt ttgtaga cagagtttt cttgttgc ccaggcttga gtagaattgt gcaatttgg ctactgcaa cctcggctc ccgggttcaa gcaatttcc tgcctcagcc tccgtagtag ctggaaatc aggcacagc cacaagccc ggttaactt ttgtatt ttgtataga tgggttttca ccatgttgg cagggttggc tgaactct gacctagg gtatccacca cctcggctc ccaagtgt ggtgtttag gttgttagcca ccggcccg cctctttt tttttggg gtaggaatc tgccttgg gttcaggctg gaaatgcat tggctactg caacctccg cctctgggtt caagtgtatc tctgtctca gcttccgg tagctgggt tagggcagc ggcacacca cccagctat ttattatt ttgttagag atggggttc accatgttgg ccaggctgt ctggaactc gacttcaag tgaatccac gctcagctt ccaaaagtgc tgggtataga ggcatgagcc accgcaacca gttgtgtat cttgtatga gaaatgtc tggtagcagg tctcttccaa cctgaaggct actggcagcc cagtgtactt gcttgggtc tggggcaggc cagatggggc ccaaggggagg ccttccctcc accgttgcagc ccccgggagt gcttggtagc tgcctgtc catggccac tcaacctt tttgtgggaa ggttccagcc ccacagggca cacactaaa gtagcagat tggaaaccg taaacctg ctgtgtccct tcaagacagt gctgtgaaaca cacagactia ggcactgtat agaaagcaga gggggccac gtagggggcc aaggtcaagg acagctcaca tgttgaacag aaacagat ctctgtcat ctgcccag ggtctactcc caggggcagg cccctgttgc tgtgaattc cggccagg cactgtcaca	A	Homo sapiens

[illegible]

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676

194903

LR92

G Protein-  
Coupled Receptor  
GPCRB3

P

Homo  
sapiens

677	194904	WO0034334-hFB41A	AX147788	VLGSSTWSPV QLNINETKIQ WHGKNHQVPK SVCSSDCLEG HQRVVTGFHH CCFECVPCGA GTFLNKSELY RQPCGTEEW APEGQTCFP RTVVFLALRE HTSWVLLAAN TLLLLLLGT AGLFAWHLDT PVVRSAGGRL CFLMLGSLAA GSGSLYGFFG EPTRPACLLR QALFALGFTI FLSCLTVRSF QLIIFKFST KVPITYHAWV QNHGAGLFLVM ISSAAQLLIC LTLWVWVTP L PAREYQRFPH LVMLECTETN SLGFLAFLY NGLLSISAF A CSYLKGLDLP NYNEAKCVTF SLLNFVSWI AFFTTASVYD GKYLPAANMM AGLSSLSSGF GGYFPLKCYV ILCRPDLNST EHFQASIQDY TRCGST gagcaacatg atcttttga agtactgac gggtctgttc ttgacggta cgaagcacagc agtggatc atgtgttc tcatggcgat A gcactgcagc atgtagaagg cagtgaggga gttctctcc ttcaaaa cgggtgggaa gaagtccgc acgatggiga agccgtagaa gggcgccagc calagcagc aggggggag gatgcacatg agcacacagc cggctctcc gggggcagcgc agcctctgc ggtatgtctc tgtctggaat ccaggagccg ccttgaacca ggtctccgg gagatccigg catagcacag ggatcgtg accacggggc ccacgaatc tatgcaaaag alaaagagga agtaggacti gtagtagagc tgcgtgtcca caggccagat ctggcgagc aagatcttt cttgctctt gacaatgac agggcgtct cgggtgggaa gtaggcggaa gggatggga tcaagatgga caccgtcac accaaggca tcaaggcagt gggtgtttgg cactcaltc gttgtctcag cggatggaca atagccagat acctagggga agaacacaag tggaggcagc c MGFMDNATN TSTSLSVLN PHGAHATSP FNFSYSDYDM PLDEDEDVTN P SRTFFAAKIV IGMALVGIML VCGIGNFIFI AALVRYKKLR NLTNLLIANL AISDFLVAIV Homo CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLYVSTNA LLALADRYL sapiens AIVHPLPRM KCQTATGLIA LVWTVSILIA IPSAYTET PVVKSQEK IFCGQIWPVD QQLYYKSYFL FIFGIEFVGP VVTMTLCYAR ISRELWFKAV PGFQTEQIRK RLRCRRKTVL VLMCLTAYV LCWAPFYGT IVRDFFTVF VKEKHYLTAF YIVECIAMSN SMINTLCFVT VKNDTVKYK KIMLLHWKAS YNGKSSADL DLKTIGMPAT EEVDCIRLK ggcacaggc gccggcgcc atgtggagct gacgtgggt caacggcaca gggctgggg agggagctgc tgcctgcag gacctgcagc tggggctgtc actgtgtc gctgtgggc tgggtggggc gttgcccagc gggctgtgtt acacggccct gctgtgtctg gccaactac acagcaaggc cagcalgacc atggcgagc tgtactgt caacatggca gttggcaggcc tgggtctcag cggcctggcc cctgtgcaac tgcctggcc cccggagctc cgggtggggc tgtggaggtt gggcggggaa gtcacgtgg cactgcagat cccctcaat gttctctac tgggtggccat gttactaac ggcctgtctga ggcctgacca ctacatcagc gttgcactgc cggcgaccata calggcagc gttgacaaca cggcgacagt gttcggtctt gttggggg ggcggtctgt gaccagcttc tctctacat ctgcagccat gttgcaacc ggcggctaga gttcgccaag atgcagaaac cagaaagctgc cggcgccagc ctgtgtgtca tgggtctac gttggcagca ctggccaacc tctacgctt gggtctactc tcccgctgc gcaaggaggga cagcccccgt gaccgggga cggcgcggtt gtagccctgc gcacacaggc tgtgtgtggc caccgtgtc acgaggtttt gggctgtggac gccaactat ctgtactgc tggggcacac ggttcaltc tcggagaggga agccgtgtga cgcacactac ctgggggtac tgcactgt gaagattt tccaacttc tggccttctc cagcagcttt gttcacaccac ttcttaccg ctacatgaac cagagttcc ccaagagctt ccaacggctg atgaanaag tgcctgtcgg ggaocggcac tgcctccgg accacatggg gttgtcagc gttgtgtc agggggccca gcccctctgg ggagagctga ctctgtggga cggcagagcac ttagtacc tggagctcc ccacatctt ccaagagggc agggagctgt ggaaagagag caggaggggt gttttctt aagttctt ttcccaaa atgccact tggggccaagg ctgtgtgtcc cgtgtgtcgt atctgtgtt agttcccg agggctgtgt gttcccaaa cagcagctc aaggttcaca tctgcaaaag	Homo sapiens
678	194904	WO0034334-hFB41A	LR114	gagcaacatg atcttttga agtactgac gggtctgttc ttgacggta cgaagcacagc agtggatc atgtgttc tcatggcgat A gcactgcagc atgtagaagg cagtgaggga gttctctcc ttcaaaa cgggtgggaa gaagtccgc acgatggiga agccgtagaa gggcgccagc calagcagc aggggggag gatgcacatg agcacacagc cggctctcc gggggcagcgc agcctctgc ggtatgtctc tgtctggaat ccaggagccg ccttgaacca ggtctccgg gagatccigg catagcacag ggatcgtg accacggggc ccacgaatc tatgcaaaag alaaagagga agtaggacti gtagtagagc tgcgtgtcca caggccagat ctggcgagc aagatcttt cttgctctt gacaatgac agggcgtct cgggtgggaa gtaggcggaa gggatggga tcaagatgga caccgtcac accaaggca tcaaggcagt gggtgtttgg cactcaltc gttgtctcag cggatggaca atagccagat acctagggga agaacacaag tggaggcagc c MGFMDNATN TSTSLSVLN PHGAHATSP FNFSYSDYDM PLDEDEDVTN P SRTFFAAKIV IGMALVGIML VCGIGNFIFI AALVRYKKLR NLTNLLIANL AISDFLVAIV Homo CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLYVSTNA LLALADRYL sapiens AIVHPLPRM KCQTATGLIA LVWTVSILIA IPSAYTET PVVKSQEK IFCGQIWPVD QQLYYKSYFL FIFGIEFVGP VVTMTLCYAR ISRELWFKAV PGFQTEQIRK RLRCRRKTVL VLMCLTAYV LCWAPFYGT IVRDFFTVF VKEKHYLTAF YIVECIAMSN SMINTLCFVT VKNDTVKYK KIMLLHWKAS YNGKSSADL DLKTIGMPAT EEVDCIRLK ggcacaggc gccggcgcc atgtggagct gacgtgggt caacggcaca gggctgggg agggagctgc tgcctgcag gacctgcagc tggggctgtc actgtgtc gctgtgggc tgggtggggc gttgcccagc gggctgtgtt acacggccct gctgtgtctg gccaactac acagcaaggc cagcalgacc atggcgagc tgtactgt caacatggca gttggcaggcc tgggtctcag cggcctggcc cctgtgcaac tgcctggcc cccggagctc cgggtggggc tgtggaggtt gggcggggaa gtcacgtgg cactgcagat cccctcaat gttctctac tgggtggccat gttactaac ggcctgtctga ggcctgacca ctacatcagc gttgcactgc cggcgaccata calggcagc gttgacaaca cggcgacagt gttcggtctt gttggggg ggcggtctgt gaccagcttc tctctacat ctgcagccat gttgcaacc ggcggctaga gttcgccaag atgcagaaac cagaaagctgc cggcgccagc ctgtgtgtca tgggtctac gttggcagca ctggccaacc tctacgctt gggtctactc tcccgctgc gcaaggaggga cagcccccgt gaccgggga cggcgcggtt gtagccctgc gcacacaggc tgtgtgtggc caccgtgtc acgaggtttt gggctgtggac gccaactat ctgtactgc tggggcacac ggttcaltc tcggagaggga agccgtgtga cgcacactac ctgggggtac tgcactgt gaagattt tccaacttc tggccttctc cagcagcttt gttcacaccac ttcttaccg ctacatgaac cagagttcc ccaagagctt ccaacggctg atgaanaag tgcctgtcgg ggaocggcac tgcctccgg accacatggg gttgtcagc gttgtgtc agggggccca gcccctctgg ggagagctga ctctgtggga cggcagagcac ttagtacc tggagctcc ccacatctt ccaagagggc agggagctgt ggaaagagag caggaggggt gttttctt aagttctt ttcccaaa atgccact tggggccaagg ctgtgtgtcc cgtgtgtcgt atctgtgtt agttcccg agggctgtgt gttcccaaa cagcagctc aaggttcaca tctgcaaaag	Homo sapiens
679	194905	G Protein-Coupled Receptor MGC7035	BC014241	gagcaacatg atcttttga agtactgac gggtctgttc ttgacggta cgaagcacagc agtggatc atgtgttc tcatggcgat A gcactgcagc atgtagaagg cagtgaggga gttctctcc ttcaaaa cgggtgggaa gaagtccgc acgatggiga agccgtagaa gggcgccagc calagcagc aggggggag gatgcacatg agcacacagc cggctctcc gggggcagcgc agcctctgc ggtatgtctc tgtctggaat ccaggagccg ccttgaacca ggtctccgg gagatccigg catagcacag ggatcgtg accacggggc ccacgaatc tatgcaaaag alaaagagga agtaggacti gtagtagagc tgcgtgtcca caggccagat ctggcgagc aagatcttt cttgctctt gacaatgac agggcgtct cgggtgggaa gtaggcggaa gggatggga tcaagatgga caccgtcac accaaggca tcaaggcagt gggtgtttgg cactcaltc gttgtctcag cggatggaca atagccagat acctagggga agaacacaag tggaggcagc c MGFMDNATN TSTSLSVLN PHGAHATSP FNFSYSDYDM PLDEDEDVTN P SRTFFAAKIV IGMALVGIML VCGIGNFIFI AALVRYKKLR NLTNLLIANL AISDFLVAIV Homo CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLYVSTNA LLALADRYL sapiens AIVHPLPRM KCQTATGLIA LVWTVSILIA IPSAYTET PVVKSQEK IFCGQIWPVD QQLYYKSYFL FIFGIEFVGP VVTMTLCYAR ISRELWFKAV PGFQTEQIRK RLRCRRKTVL VLMCLTAYV LCWAPFYGT IVRDFFTVF VKEKHYLTAF YIVECIAMSN SMINTLCFVT VKNDTVKYK KIMLLHWKAS YNGKSSADL DLKTIGMPAT EEVDCIRLK ggcacaggc gccggcgcc atgtggagct gacgtgggt caacggcaca gggctgggg agggagctgc tgcctgcag gacctgcagc tggggctgtc actgtgtc gctgtgggc tgggtggggc gttgcccagc gggctgtgtt acacggccct gctgtgtctg gccaactac acagcaaggc cagcalgacc atggcgagc tgtactgt caacatggca gttggcaggcc tgggtctcag cggcctggcc cctgtgcaac tgcctggcc cccggagctc cgggtggggc tgtggaggtt gggcggggaa gtcacgtgg cactgcagat cccctcaat gttctctac tgggtggccat gttactaac ggcctgtctga ggcctgacca ctacatcagc gttgcactgc cggcgaccata calggcagc gttgacaaca cggcgacagt gttcggtctt gttggggg ggcggtctgt gaccagcttc tctctacat ctgcagccat gttgcaacc ggcggctaga gttcgccaag atgcagaaac cagaaagctgc cggcgccagc ctgtgtgtca tgggtctac gttggcagca ctggccaacc tctacgctt gggtctactc tcccgctgc gcaaggaggga cagcccccgt gaccgggga cggcgcggtt gtagccctgc gcacacaggc tgtgtgtggc caccgtgtc acgaggtttt gggctgtggac gccaactat ctgtactgc tggggcacac ggttcaltc tcggagaggga agccgtgtga cgcacactac ctgggggtac tgcactgt gaagattt tccaacttc tggccttctc cagcagcttt gttcacaccac ttcttaccg ctacatgaac cagagttcc ccaagagctt ccaacggctg atgaanaag tgcctgtcgg ggaocggcac tgcctccgg accacatggg gttgtcagc gttgtgtc agggggccca gcccctctgg ggagagctga ctctgtggga cggcagagcac ttagtacc tggagctcc ccacatctt ccaagagggc agggagctgt ggaaagagag caggaggggt gttttctt aagttctt ttcccaaa atgccact tggggccaagg ctgtgtgtcc cgtgtgtcgt atctgtgtt agttcccg agggctgtgt gttcccaaa cagcagctc aaggttcaca tctgcaaaag	Homo sapiens

680	194905	G Protein-Coupled Receptor MGC7035	LR112	<p>ccctctggcc ttcagcctcc tccagcttca gttgtcaat gaagtga tga aagcttagag ccagttatt tactttgtgg ttaaaatact tgattccccc ttgtttgtt tacaaaaa gatgtttcti agaaaaatga caaatagtaa aatgaacaaa accctacgaa agaatggcaa cagccagggg ggccggggcc tgcagtgagg cggcggtgic tagcaaggcc tgcagggtgt ggcgcagtca ccacaggggt ctgagaacat ticacagaag tgcctgagac gcggagacat ggcctgggtt aatlggagct attcaatagc agtgacggcg tctctcagc caccaaatgt cctgacacc ctcgccagcc ccacagata acatcagctg aggtttttt cagttatgaac ctgtcttaaa tcaattctc aagtggtgca caaactaaa gaataaat aaacaaga aaggtgaata aaaaaaaa aaaa MWSCSWFNGT XLVEELXACQ DLQLGLSLLS LLGLVGVVPV GLCYNALLVL ANLHASKASMT MPDVYFVNMA VAGL VLSALA PVHLLGPPSS RWALWSVGGE VHVALQIPFN VSSLVAMYST ALLSLDHYE RALPRTYMAS VYNTRHVCGF VWGGALLTSF SLLFYICSH VSTRALECAK MQNAEADAT LVFIGYVYVPA LATLYALVLL SRVRREDTPL DRDTGRLEPS AHRLLVATVC TQFGLWTPHY LILLGHTVII SRGKPVDAHY LGLLHFVKDF SKLLAFSSSF VTPLLRYMIN QSFPSKLQRL MKKLPCGDRH CSPDHMGVQQ VLA TCCGGA CTAG TTCTAGACCG CTGCGGGCCG CCAGGGCCCG GGAATGTCCC CTGAATGCGC GCGGGCAGCG GCGGACGCGC CCTTGGCAG CCTGGAGCAA GCCAACCGCA CCCGCTTCC CTCTCTCC GACGTCAAG GCGACCAACG GCTGTGCTG GCGCGGTGG AGACAAACCGT GCTGTGCTC ATCTTGCAG TGTCGCTGCT GGGCAACGTG TCGCCCTGG TGCTGTGGC GCGCCGACGA CGCGCGCG CGACTGCTG CCTGTACTC AACCTCTCT GCGCGGACCT GCTCTTATC AGCGTATCC CTCTGGTCT GCGCTGCGC TGGACTGAGG CCTCCCTGCT GGGCCCCGT GCTGCCACC TGCTCTTCTA CGTGATGACC CTGAGCGGCA GCGTACCAT CCTACGCTG GCGCGGTCA GCCTGGAGGG CATGTGRGC ATCGRGACC TGGAGCGCG GGTGCGGGGT CCTCCGCGG GGCGCGGGC AGTGTGCTG GCSTCATCT GGGCTATTG GCGGTGCGC GCTCTGCCCT TGTGCTCTT CTTCGAGTC GTCCCGCAAC GGCTCCCGG CGCGACCCAG GAAATTCGA TTGACACAT GATTGGCCC AGCATTCCTC GAGAGATCTC GTGGGATGC TCTTTGTTA CTTTGAACCTT CTGTGTGCA GGA CTGGTCA TTGTGATCAG TTA CTCCAAA ATTTACAGA TCACAAAGG ATCAAGGAAG AGGTCACCG TAAGCCTGGC CTACTCGGAG ACCCACCAGA TCCGCGTGC CCAGCAGGAC TTCCGGCTCT TCCGCACCT CTTCCTCTC ATGCTCTCT TCTTCATCAT GTGGAGCCCC ATCATCATCA CCATCTCTCT CATCTGATC CAGAACTCA AGCAAGACCT GGTCACTCTGG CCGTCCCTCT TCTTCTGGGT GTCCCCCTC ACATTTGCTA ATTACGCCCT AAACCCCATC CTCTACACA TGACACTGTG CAGGAATGAG TGGAGAAAA TTTTGTCTG CTTCTGGTTC CCAGAAAAGG GAGCCATTT AACAGACACA TCTGTCAAAA GAAATGACTT GTCGATTAT TCTGGCTAAT TTCTTTATA GCCGAGTTTC TCACACCTGG CGAGCTGTG CATGCTTTA AACAGAGTTC ATTCCAGTA CCCTCCATCA GTGCAACCTG CTTTAAAAA ATGAACCTAT GCAAATAGAC ATCCACAGCG TCGTAAAT AAGGGTGAT CACCAAGTTT CATAATATT TCCCTTTATA AAAGGATTTG TTGGCCAGGT GCAGTGGTTC ATGCTGTAA</p>	P	Homo sapiens
681	194907	G Protein-Coupled Receptor 14273	LD22826	<p>TCCGGA CTAG TTCTAGACCG CTGCGGGCCG CCAGGGCCCG GGAATGTCCC CTGAATGCGC GCGGGCAGCG GCGGACGCGC CCTTGGCAG CCTGGAGCAA GCCAACCGCA CCCGCTTCC CTCTCTCC GACGTCAAG GCGACCAACG GCTGTGCTG GCGCGGTGG AGACAAACCGT GCTGTGCTC ATCTTGCAG TGTCGCTGCT GGGCAACGTG TCGCCCTGG TGCTGTGGC GCGCCGACGA CGCGCGCG CGACTGCTG CCTGTACTC AACCTCTCT GCGCGGACCT GCTCTTATC AGCGTATCC CTCTGGTCT GCGCTGCGC TGGACTGAGG CCTCCCTGCT GGGCCCCGT GCTGCCACC TGCTCTTCTA CGTGATGACC CTGAGCGGCA GCGTACCAT CCTACGCTG GCGCGGTCA GCCTGGAGGG CATGTGRGC ATCGRGACC TGGAGCGCG GGTGCGGGGT CCTCCGCGG GGCGCGGGC AGTGTGCTG GCSTCATCT GGGCTATTG GCGGTGCGC GCTCTGCCCT TGTGCTCTT CTTCGAGTC GTCCCGCAAC GGCTCCCGG CGCGACCCAG GAAATTCGA TTGACACAT GATTGGCCC AGCATTCCTC GAGAGATCTC GTGGGATGC TCTTTGTTA CTTTGAACCTT CTGTGTGCA GGA CTGGTCA TTGTGATCAG TTA CTCCAAA ATTTACAGA TCACAAAGG ATCAAGGAAG AGGTCACCG TAAGCCTGGC CTACTCGGAG ACCCACCAGA TCCGCGTGC CCAGCAGGAC TTCCGGCTCT TCCGCACCT CTTCCTCTC ATGCTCTCT TCTTCATCAT GTGGAGCCCC ATCATCATCA CCATCTCTCT CATCTGATC CAGAACTCA AGCAAGACCT GGTCACTCTGG CCGTCCCTCT TCTTCTGGGT GTCCCCCTC ACATTTGCTA ATTACGCCCT AAACCCCATC CTCTACACA TGACACTGTG CAGGAATGAG TGGAGAAAA TTTTGTCTG CTTCTGGTTC CCAGAAAAGG GAGCCATTT AACAGACACA TCTGTCAAAA GAAATGACTT GTCGATTAT TCTGGCTAAT TTCTTTATA GCCGAGTTTC TCACACCTGG CGAGCTGTG CATGCTTTA AACAGAGTTC ATTCCAGTA CCCTCCATCA GTGCAACCTG CTTTAAAAA ATGAACCTAT GCAAATAGAC ATCCACAGCG TCGTAAAT AAGGGTGAT CACCAAGTTT CATAATATT TCCCTTTATA AAAGGATTTG TTGGCCAGGT GCAGTGGTTC ATGCTGTAA</p>	A	Homo sapiens

682	194907	G Protein- Coupled Receptor 14273	LR116	<p>TCCAGCAGT TTGGGCTGAG GTGGGTGGAT CACCTGAGGT CAGGAGTTCG  AGACCAACCT GACCAACATG GTGAGACCCC CGTCTCTACT AAAAAATAAA  AAAAAATAA GCTGGGAGTG GTGGTGGCA CCTGTAATCC TAGCTACTTG  GGAGGCTCAA CCACGAGAT CTCTGAACC TGGGAGGCAG AGGTTGCAGT  GAGCCGAGAT CGTGCCATTG CACTCCAAC AGGCAACAA GAGTGAAACT  CCATCTTAA AAAAAAATAA AAGATTGT TATGGGTTCC TTATAATGT  GAACTTTTT AGTGTTTG TATATGATCA AATTATAA ATATTATTT  ATGACTGTT AGCAAAAAA AAAAAAATAA AGGCGG  MSPECARAA GDAPLRSLEQA NRTFPFFSD VKGDHRLVLA AVETTVLVLI  FAVSLGNVC ALVLVARRRR RGATACLVNL LFCADLLFIS AIPLVLA VRW  TEAWLLGPVA CHLLFYVMTL SGSVTILTLA AVSLDRMVCI VMLQRGVRCP  GRRARAVLLA LIWGSAAVA LPLCVFFRVV PQLPLGADQE ISICTLIWPT  IPGEISWDVS FVTNLFLVPG LVIVISYSKI LQTKASRKR LTVSLAYSRS HQIRVSQQDF  RLFRITFLM VSFETMWSP IIDLILILIQ NFKQDLVIWP SLPPWVVAFT FANSALNPIL  YNMILCRNEW KKIFCCTWFP EKGAILTDT S VKRNDLSIIS G  ITYSAISDEL RDKVRFPALL RTTPSADHHV EAMVQLMLHF RWNWIVLVS  SDTYGRDNGQ LLGERVARRD ICIAFQETLP TLQPNQNMTS EERQRLVTIV  DKLQQSTARV VVVFSPDLTL YHFFNEVL RQ NFGAVVWIAS ESWAIDPVLH  NLTELGHG LT FLGITIQSV IPGFSEFREW GPQAGPPPLS RTSQSYTCNQ  ECDNCLNATL SFNTILRLSG ERVVVSVYSA VYAVAHALHS LLGCDKSTCT  KRVPVPWQLL EEIWKVNFTL LDHQIFDPO QWQWDRSQNP  FQSVASYPL QRLKNIKTS LHTVNNTIPM SMCSCRQCSG QKKKPVGIHV  CCFECIDCLP GTFLNHTCP NNEWSYQSET SCFKRQLVFL EWHEAPTIV  ALLAALGFLS TLAILVFWR HFQTPIVRSA GGPMLFLMLT LLLVAYMVVP  VYVGPVKVST CLCRQALFPL CFTICISIA VRSFQIVCAF KMASRFPRAV  SYWVRYQGPY VSMAFITVLK MVIVVIGMLA RQSHPRITDP DDPKITIVSC  NPNYRNSLLF NTSLDLLSV VGFSFAYMGK ELPTNYNEAK FITLSMTFYF  TSSVSLCTFM SAYSGVLVTI VDLLVTVLNL LAISLGYFGP KCYMILFYPE  RNTPAYFNMS IQGYTMRRD</p>	P	Homo sapiens
683	194908	G Protein-coupled Receptor Gpcrb4	LR117	<p>aigagcagca attcalccct gctggggct gggcagct gctacgcga cgtgaalggg tccigtgiga aaatccctt  ctgcgcggga tccgggiga tictgiact agigtggc ttggggctg tgcigtgct gttggaaac ctccgtgiga tgaattcaat  ctccattic aagcagctgc acctccgac caatttctc gttgcctc tggcctgcgc tgaattctg gggggtgiga ctggtgac  cttcagcatg gtcagagcgg tggagagctg cttgatttt gggagaggtt ttgtaatt ccaacctgc tgggtgagc catttgta  cttctctc tticattgt gttcattc cactgacagg tacattgcgg ttactgacc cctggtctat cctaccaagt tcccgtaic  tgggtcagga attgtcalca gcgtgtctg gatctggcc ctatgta cgcgtgctgt gttctacaca ggtgtctatg acgatggct  ggaggaatta tctgatgcc taactgtat agggaggtgt cagacogttg taatacaaaa ctgggtgtg acagatttc tatctctt  tatacciacc ttattatga taattctgta tggtaacala ttictgtgg ciagagcaca ggcgaaagag atagaaaaa ctggtagcaa  gacagaalca tctcagaga gttacaagc cagagtgggc agggagagga gaaagagcag taaaaccccg ggggtcacag  tggtagcatt tatgattca tggtaacct atagcattga ttcaattt gatgcctta tggccttat aaccctgccc tgtattatg  agattgtctg ttgggtgct tattataact cagocagtaa tccittgatt tatgcttat ttacocatg gtttaggaaa gcaataaag</p>	P	Homo sapiens
684	194957	Trace Amine Receptor 4 (TA4)	AF380192	<p>aigagcagca attcalccct gctggggct gggcagct gctacgcga cgtgaalggg tccigtgiga aaatccctt  ctgcgcggga tccgggiga tictgiact agigtggc ttggggctg tgcigtgct gttggaaac ctccgtgiga tgaattcaat  ctccattic aagcagctgc acctccgac caatttctc gttgcctc tggcctgcgc tgaattctg gggggtgiga ctggtgac  cttcagcatg gtcagagcgg tggagagctg cttgatttt gggagaggtt ttgtaatt ccaacctgc tgggtgagc catttgta  cttctctc tticattgt gttcattc cactgacagg tacattgcgg ttactgacc cctggtctat cctaccaagt tcccgtaic  tgggtcagga attgtcalca gcgtgtctg gatctggcc ctatgta cgcgtgctgt gttctacaca ggtgtctatg acgatggct  ggaggaatta tctgatgcc taactgtat agggaggtgt cagacogttg taatacaaaa ctgggtgtg acagatttc tatctctt  tatacciacc ttattatga taattctgta tggtaacala ttictgtgg ciagagcaca ggcgaaagag atagaaaaa ctggtagcaa  gacagaalca tctcagaga gttacaagc cagagtgggc agggagagga gaaagagcag taaaaccccg ggggtcacag  tggtagcatt tatgattca tggtaacct atagcattga ttcaattt gatgcctta tggccttat aaccctgccc tgtattatg  agattgtctg ttgggtgct tattataact cagocagtaa tccittgatt tatgcttat ttacocatg gtttaggaaa gcaataaag</p>	A	Homo sapiens



685	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	<p>ttattgaac tggctcaggt ttaagaaca gttcagaac catgaattg ttctgaac atataaa</p> <p>MSSNSLLVA VOLCYANVNG SCVKIPFSPG SRVLYIVFG FGAVLAVFGN</p> <p>LLVMISILHF QLHSPTNFL VASLACADFL VGVTVMPFSM VRTVESCWFY</p> <p>GRSCTFHTC CDVAFCYSSL FHLCFISDR YIAVTDPLVY PTKFTVSVS GICISVSWILP</p> <p>LMYSGAVFYT GUYDDGLEEL SDALNCIGGC QTVVNQNWVL TDFLSFFIPT</p> <p>FIMILYGNJ FLVARRQAKK IENTGSKTES SSESICYKARVA RRERKAAKTL</p> <p>GVTVAFMIS WLPYSIDSLI DAFMGFTIPA CIEYICCWCA YNSAMNPLI</p> <p>YALFYPWFRK AIKVVITGVQV LKNSSATMNL FSEHI</p> <p>atgacagca attttccca acctgttg cagcttggc atgaggatgt gaaatgaatc tgaatgaac ctccattc tccigggtc</p> <p>cgggtaatic tgaacagcg gtttagctt tggcttggc tggctgtatt tggaaatc tgaatgaac ctctgtct tcatttaag</p> <p>cagctgcat cccaaccaa ttctcatt gccctctgg cctgtgtg cctgtgtg cctgtgtg ggtgtg cagctgtg</p> <p>aggacgtgg agagctgtg gttatgga gccaaattt gtaatttca cagctgtg ggtgtg cagctgtg tttgtatc tttgtgtc</p> <p>cactgtgt tcatgtcat cgaagagac attgtgga cgtatccct ggtatgtc accaagta cgtgtgtg gtcgggaat</p> <p>tgcacagcg tgcctgtg tgcctgtc acgtacagcg ggtgtgtg ctacacag gtaaatgag atgggtgga</p> <p>ggaattaga aggtgtc tgcctgtg tgcctgtg attatgaac gtaacagcg ggtgtgata gatttgtt tatttcat</p> <p>acctacct gttatgaac tttttatga taagatttt ctatagca aacaacagc tataaaat gaaactata gtagcaagt</p> <p>agaatccc tcaagaggt ataaatcag agtggtcag agagagagga aagcagc taa aacctgtgg gtcacgtac</p> <p>tagcattgt tatttcatg taccgata cagttgat ataatgat gccattg gcttctgac cctgtgtc atctatgaaa</p> <p>ttgtgtg ggtgtgt tataactag ccaaatcc ttgattat gctattt atcctgtt taggaaagc ataaactia</p> <p>tttaagtg agatgtta aaggctgt catcaact tagttatt tgaataa</p> <p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVLYTAFSF GSLLAVFGNL</p> <p>LVMTSVLHFK QLHSPTNFLI ASLACADFLV GVTVMFLSMV RTVESCWFY</p> <p>AKFCTLHSCC DVAFCYSSLV HLCFICIDRY IVVTDPLVYA TKFTVSVS GICISVSWILP</p> <p>TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWLI DFLFPTL VMILYSKIF</p> <p>LIAKQQAIIETTSSKVESS SESYKIRVAK RERKAAKTLG VIVLAFVISW LPYTVDLID</p> <p>AFMGFLTPAY IYEICCWSA YNSAMNPLIY ALFYPWFRKA IKLLSGDVL</p> <p>KASSTISLF LE</p>	P	Homo sapiens
686	194958	Trace Amine Receptor 5 (TA5)	AF380193	<p>ttattgaac tggctcaggt ttaagaaca gttcagaac catgaattg ttctgaac atataaa</p> <p>MSSNSLLVA VOLCYANVNG SCVKIPFSPG SRVLYIVFG FGAVLAVFGN</p> <p>LLVMISILHF QLHSPTNFL VASLACADFL VGVTVMPFSM VRTVESCWFY</p> <p>GRSCTFHTC CDVAFCYSSL FHLCFISDR YIAVTDPLVY PTKFTVSVS GICISVSWILP</p> <p>LMYSGAVFYT GUYDDGLEEL SDALNCIGGC QTVVNQNWVL TDFLSFFIPT</p> <p>FIMILYGNJ FLVARRQAKK IENTGSKTES SSESICYKARVA RRERKAAKTL</p> <p>GVTVAFMIS WLPYSIDSLI DAFMGFTIPA CIEYICCWCA YNSAMNPLI</p> <p>YALFYPWFRK AIKVVITGVQV LKNSSATMNL FSEHI</p> <p>atgacagca attttccca acctgttg cagcttggc atgaggatgt gaaatgaatc tgaatgaac ctccattc tccigggtc</p> <p>cgggtaatic tgaacagcg gtttagctt tggcttggc tggctgtatt tggaaatc tgaatgaac ctctgtct tcatttaag</p> <p>cagctgcat cccaaccaa ttctcatt gccctctgg cctgtgtg cctgtgtg cctgtgtg ggtgtg cagctgtg</p> <p>aggacgtgg agagctgtg gttatgga gccaaattt gtaatttca cagctgtg ggtgtg cagctgtg tttgtatc tttgtgtc</p> <p>cactgtgt tcatgtcat cgaagagac attgtgga cgtatccct ggtatgtc accaagta cgtgtgtg gtcgggaat</p> <p>tgcacagcg tgcctgtg tgcctgtc acgtacagcg ggtgtgtg ctacacag gtaaatgag atgggtgga</p> <p>ggaattaga aggtgtc tgcctgtg tgcctgtg attatgaac gtaacagcg ggtgtgata gatttgtt tatttcat</p> <p>acctacct gttatgaac tttttatga taagatttt ctatagca aacaacagc tataaaat gaaactata gtagcaagt</p> <p>agaatccc tcaagaggt ataaatcag agtggtcag agagagagga aagcagc taa aacctgtgg gtcacgtac</p> <p>tagcattgt tatttcatg taccgata cagttgat ataatgat gccattg gcttctgac cctgtgtc atctatgaaa</p> <p>ttgtgtg ggtgtgt tataactag ccaaatcc ttgattat gctattt atcctgtt taggaaagc ataaactia</p> <p>tttaagtg agatgtta aaggctgt catcaact tagttatt tgaataa</p> <p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVLYTAFSF GSLLAVFGNL</p> <p>LVMTSVLHFK QLHSPTNFLI ASLACADFLV GVTVMFLSMV RTVESCWFY</p> <p>AKFCTLHSCC DVAFCYSSLV HLCFICIDRY IVVTDPLVYA TKFTVSVS GICISVSWILP</p> <p>TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWLI DFLFPTL VMILYSKIF</p> <p>LIAKQQAIIETTSSKVESS SESYKIRVAK RERKAAKTLG VIVLAFVISW LPYTVDLID</p> <p>AFMGFLTPAY IYEICCWSA YNSAMNPLIY ALFYPWFRKA IKLLSGDVL</p> <p>KASSTISLF LE</p>	A	Homo sapiens
687	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	<p>ttattgaac tggctcaggt ttaagaaca gttcagaac catgaattg ttctgaac atataaa</p> <p>MSSNSLLVA VOLCYANVNG SCVKIPFSPG SRVLYIVFG FGAVLAVFGN</p> <p>LLVMISILHF QLHSPTNFL VASLACADFL VGVTVMPFSM VRTVESCWFY</p> <p>GRSCTFHTC CDVAFCYSSL FHLCFISDR YIAVTDPLVY PTKFTVSVS GICISVSWILP</p> <p>LMYSGAVFYT GUYDDGLEEL SDALNCIGGC QTVVNQNWVL TDFLSFFIPT</p> <p>FIMILYGNJ FLVARRQAKK IENTGSKTES SSESICYKARVA RRERKAAKTL</p> <p>GVTVAFMIS WLPYSIDSLI DAFMGFTIPA CIEYICCWCA YNSAMNPLI</p> <p>YALFYPWFRK AIKVVITGVQV LKNSSATMNL FSEHI</p> <p>atgacagca attttccca acctgttg cagcttggc atgaggatgt gaaatgaatc tgaatgaac ctccattc tccigggtc</p> <p>cgggtaatic tgaacagcg gtttagctt tggcttggc tggctgtatt tggaaatc tgaatgaac ctctgtct tcatttaag</p> <p>cagctgcat cccaaccaa ttctcatt gccctctgg cctgtgtg cctgtgtg cctgtgtg ggtgtg cagctgtg</p> <p>aggacgtgg agagctgtg gttatgga gccaaattt gtaatttca cagctgtg ggtgtg cagctgtg tttgtatc tttgtgtc</p> <p>cactgtgt tcatgtcat cgaagagac attgtgga cgtatccct ggtatgtc accaagta cgtgtgtg gtcgggaat</p> <p>tgcacagcg tgcctgtg tgcctgtc acgtacagcg ggtgtgtg ctacacag gtaaatgag atgggtgga</p> <p>ggaattaga aggtgtc tgcctgtg tgcctgtg attatgaac gtaacagcg ggtgtgata gatttgtt tatttcat</p> <p>acctacct gttatgaac tttttatga taagatttt ctatagca aacaacagc tataaaat gaaactata gtagcaagt</p> <p>agaatccc tcaagaggt ataaatcag agtggtcag agagagagga aagcagc taa aacctgtgg gtcacgtac</p> <p>tagcattgt tatttcatg taccgata cagttgat ataatgat gccattg gcttctgac cctgtgtc atctatgaaa</p> <p>ttgtgtg ggtgtgt tataactag ccaaatcc ttgattat gctattt atcctgtt taggaaagc ataaactia</p> <p>tttaagtg agatgtta aaggctgt catcaact tagttatt tgaataa</p> <p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVLYTAFSF GSLLAVFGNL</p> <p>LVMTSVLHFK QLHSPTNFLI ASLACADFLV GVTVMFLSMV RTVESCWFY</p> <p>AKFCTLHSCC DVAFCYSSLV HLCFICIDRY IVVTDPLVYA TKFTVSVS GICISVSWILP</p> <p>TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWLI DFLFPTL VMILYSKIF</p> <p>LIAKQQAIIETTSSKVESS SESYKIRVAK RERKAAKTLG VIVLAFVISW LPYTVDLID</p> <p>AFMGFLTPAY IYEICCWSA YNSAMNPLIY ALFYPWFRKA IKLLSGDVL</p> <p>KASSTISLF LE</p>	P	Homo sapiens
688	194989	MrgX4 G Protein-Coupled Receptor	AY042216	<p>ttattgaac tggctcaggt ttaagaaca gttcagaac catgaattg ttctgaac atataaa</p> <p>MSSNSLLVA VOLCYANVNG SCVKIPFSPG SRVLYIVFG FGAVLAVFGN</p> <p>LLVMISILHF QLHSPTNFL VASLACADFL VGVTVMPFSM VRTVESCWFY</p> <p>GRSCTFHTC CDVAFCYSSL FHLCFISDR YIAVTDPLVY PTKFTVSVS GICISVSWILP</p> <p>LMYSGAVFYT GUYDDGLEEL SDALNCIGGC QTVVNQNWVL TDFLSFFIPT</p> <p>FIMILYGNJ FLVARRQAKK IENTGSKTES SSESICYKARVA RRERKAAKTL</p> <p>GVTVAFMIS WLPYSIDSLI DAFMGFTIPA CIEYICCWCA YNSAMNPLI</p> <p>YALFYPWFRK AIKVVITGVQV LKNSSATMNL FSEHI</p> <p>atgacagca attttccca acctgttg cagcttggc atgaggatgt gaaatgaatc tgaatgaac ctccattc tccigggtc</p> <p>cgggtaatic tgaacagcg gtttagctt tggcttggc tggctgtatt tggaaatc tgaatgaac ctctgtct tcatttaag</p> <p>cagctgcat cccaaccaa ttctcatt gccctctgg cctgtgtg cctgtgtg cctgtgtg ggtgtg cagctgtg</p> <p>aggacgtgg agagctgtg gttatgga gccaaattt gtaatttca cagctgtg ggtgtg cagctgtg tttgtatc tttgtgtc</p> <p>cactgtgt tcatgtcat cgaagagac attgtgga cgtatccct ggtatgtc accaagta cgtgtgtg gtcgggaat</p> <p>tgcacagcg tgcctgtg tgcctgtc acgtacagcg ggtgtgtg ctacacag gtaaatgag atgggtgga</p> <p>ggaattaga aggtgtc tgcctgtg tgcctgtg attatgaac gtaacagcg ggtgtgata gatttgtt tatttcat</p> <p>acctacct gttatgaac tttttatga taagatttt ctatagca aacaacagc tataaaat gaaactata gtagcaagt</p> <p>agaatccc tcaagaggt ataaatcag agtggtcag agagagagga aagcagc taa aacctgtgg gtcacgtac</p> <p>tagcattgt tatttcatg taccgata cagttgat ataatgat gccattg gcttctgac cctgtgtc atctatgaaa</p> <p>ttgtgtg ggtgtgt tataactag ccaaatcc ttgattat gctattt atcctgtt taggaaagc ataaactia</p> <p>tttaagtg agatgtta aaggctgt catcaact tagttatt tgaataa</p> <p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVLYTAFSF GSLLAVFGNL</p> <p>LVMTSVLHFK QLHSPTNFLI ASLACADFLV GVTVMFLSMV RTVESCWFY</p> <p>AKFCTLHSCC DVAFCYSSLV HLCFICIDRY IVVTDPLVYA TKFTVSVS GICISVSWILP</p> <p>TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWLI DFLFPTL VMILYSKIF</p> <p>LIAKQQAIIETTSSKVESS SESYKIRVAK RERKAAKTLG VIVLAFVISW LPYTVDLID</p> <p>AFMGFLTPAY IYEICCWSA YNSAMNPLIY ALFYPWFRKA IKLLSGDVL</p> <p>KASSTISLF LE</p>	A	Homo sapiens

P Homo sapiens

P

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SMLSISTER CLSVLWPIWY RRRPHTLSA VVCVLLWGLS LLFSMLEWRF  
CDFLSGADS SWCETSDFIP VAWLJFLCVV LCVSSLVLLV RILCGSRKMP  
LTRLVVTILL TVLVFLLCGL PFGILGALTY RMHLNLEVLV CHVYLVCMMSL  
SSLNSSANPI IYFFVGSFRQ RQNRQNKLKLV LQRALQDKPE VDKGEGQLPE  
ESELGSRLL GP

689 194989 MrgX4 G AAK91807.1

Protein-Coupled  
Receptor

A Homo sapiens

A

atgaacaaca atacaacatg taitcaacca tctatgatct ctccaatggc ttaccaate attacatcc tctttgtat tgttgtgtt  
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690 195015 AF411111

G Protein-  
Coupled Receptor  
GPR82

P Homo sapiens

P

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NLLVCSAMPF MSYFLKGFQ WEYQSAQCRV VNFLGTL SMH ASMFVSLIL  
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CQQLNYLIET KNILTCLASA RSSTDPHIFL LLDKTFKKTL YNLFKTSNSA HMQSYG

691 195015 AAL26482

G Protein-  
Coupled Receptor  
GPR82

SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	Species
1	127	5-HT1A Receptor	NM_000524	atggatgtgc tcagccctgg tcagggcaac aacaccacat caccaccggc tccttttgag accggcgga acactactgg tatctccgac gtgaccgtca gctaccaagt gatcacctct ctgtctgtgg gaacgtctcat ctctcgcg gtgctggga atgcgtcgt ggtgctgccc atgccttgg agcgtctccct gcagaaactg gccaatatc ttattggctc ttggtcggtc accgaacctca tgggtgctgggt gttggtgctg cccatggccg cgtgtatca ggtgtcaaac aagtggacac tgggcccagggt aacctgcgac ctgttccatcg cctcgacgt gctgtgtgc acctcatcca tcttgacact gtgcgccatc ggcctggaca ggtactgggc catcacggac cccatcgact acgtgaacaa gaggacgcc cggccgcgtg cgtcatctc gctcactgg cttattggct tctcatctc tatccgcc atcctgggct ggcgcacccc ggaagaccgc tcggaccccc acgcatgac cattagcaag gatcatggct acatatcta ttccacttt ggagctttct acatcccgct gctgctcatg ctggttctct atggcgcat attccgact gcgccttcc gcatccgcaa gacgttcaa aggtggaga agaccggagc ggacaccgc catggagcat ctcccgcccc gcagcccaag aagagtgtga atggagagtc ggggagcagg aactggaggc tggcgttggga gagcaaggct ggggtgtgctc tgtgcgcaa tggcgcgtg aggcaaggct acgatggcgc gcccctggag ggtatcgagg tgcaccgagt gggcaactcc aaagagcact tgcctctgcc cagcaggct ggtcctaccc cttgtgccc cgcctcttc gagagaaaa atgagcgcaa cgccgaggcg aagcgcaaga tggccctggc ccgagagagg aagacagtga agacgtggg catcatcatg ggcaccttca tctctgctg gctgcccctc ttcatcgctg ctcttgttct gcccttctgc gagagcagct gccacatgcc caccctgtg ggcccatata tcaattggct gggctactcc aactctctgc ttaaccccg catttaagca tacttcaaca aggactttca aaacgcgttt aagaagatca ttaagtgtaa cttctgcgc cagtga	A	Homo sapiens
2	127	5-HT1A Receptor	NP_000515.1	MDVLSPGQGN NTTSPAPFE TGGNTTGISD VIVSYQVITS LLLGTLIFCA VLGNACVVAA IALERSLQNV ANYLIGSLAV TDLMSVLVL PMAALYQVLN KWTLGQVTC LFIALDVLCC TSSILHLCAI ALDRYWAITD PIDYVNRTP RPRALISLTW LIGFLISIPP ILGWRTPEDR SDPDACTISK DHGYTIYSTF GAFYIPLLLM LVLYGRIFRA ARFRIRKTVK KVEKTGADTR HGASPAPOPK KSVNGESGSR NWRLGVESKA GGALCANGAV RQDDGGALE VIEVHRVGN KEHLPLPSEA GPTPCAPASF ERKNERNAEA KRKMALARER KTVKTLGIIM GTFILCWLPE FIVALVLPFC ESSCHMPTLL GAIINWLGYS NSLNPVIYA YFNKDFQNAF KKIIKCNFCR Q	P	Homo sapiens
3	128	5-HT1B Receptor	NM_000863	atggaggaaac cgggtgtctca gtgcgctcca cgcgcgcgcg cgggctccga gacctgggtt cctcaagcca actatctctc tgcctccctc caaaactgca gcgccaagga ctacatttac caggactcca tctccctacc ctggaaaagta ctgctgggta tgcatttggc gctcatcacc ttggccacca cgctctccaa tgcctttgtg attgccacag tgtaccggac ccggaactg cacaccccg ctaactacct gatgcctct ctggcggtca ccgacctgct tgtgtccatc ctggtgatgc ccatcagcac catgtacact gtcacggcc cgtggacact gggccagggtg gtctgtgact tctgggtgtc gtcgacatc acttgttgca tgcctccat cctgcacctc tgtgtcatcg cctggaccg ctactgggc atcaggagc ccgtggagta ctcagctaaa aggactccca agaggcggc ggtcatgac gcgctggtgt ggtcttctc catctctatc	A	Homo sapiens

Chromosome	Position (kb)	Gene	Transcript	Sequence	Species
4	128	5-HT1B Receptor	NP_000854.1	<p>tgcgtgcgc ccttctctg ggcgtcaggct aaggccgaag aggcaggtgc ggaatgcgtg</p> <p>gtgaacacg accatcctt ctacacgtc tactccacgg tgggtgcttt ctactcccc</p> <p>acctgtctc tcatgcctt ctatggcgc atctacgtag aagccgcgc ccggattttg</p> <p>aaacagacg ccaacaggac cggcaagcg cctctctatt aactcgcgg tcccgaactg aaccgactcc</p> <p>ccgggtcca cgtcctcgtt caactctatt aactcgcgg tcccgaactg gcccagcgaa</p> <p>tccggatctc ctgtgtatgt gaaccaagtc aaagtgcgag tctccgacgc cctgctggaa</p> <p>aagaagaac tcatggcgc tagggagcgc aaagccacca agaccctagg gatcattttg</p> <p>ggagccttta ttgtgtgtg gctacccttc tcatcctatc cctagtgat gctatctgc</p> <p>aaagatgctt gctggttcca cctagccatc ttgacttctt tcacatggct gggctatctc</p> <p>aactccctca tcaaccccat aatctatacc atgtccaatg aggcatttta acaagcattc</p> <p>cataaactga tacgttttaa gtgcacaagt tga</p>	Homo sapiens
5	129	5-HT1D Receptor	NM_000864	<p>agccaaatgt gtggaggtct gtgggaagag agagccacct agcatgtccc cactgaacca</p> <p>gtcagcagaa ggccttcccc aggcagcctc caacagatcc ctgaatgcca cagaacctc</p> <p>agaggtcttg gatccacaga cctccaggc gctccagatc tccctggcg tggctcttcc</p> <p>cgtcatcaca cgtggccacag tctctctcaa tgcctttgta ctcaccacca tcttactcac</p> <p>caggaagctc cacacccctg ccaactacct gattggctcc ctggccacca ccgacctctt</p> <p>ggtttccatc ttggtaatgc ccatcagcat gcctctacc atcacccaca cctggaaactt</p> <p>tgccaaaatc ttgtgtgaca tctggctgtc ctctgacatc acgtgtgca cagcctcat</p> <p>cctgcattct tgtgtcattg cctgggacag gtactgggca atcacagatg ccttggaaata</p> <p>cagtataacg aggcaggtg gccacgcggc caccatgac gccattgtct gggccatctc</p> <p>catctgcatc tccatcccc cgtctctctg gggcagggc aaggccagg aggcagatgc</p> <p>ggactgtctg gtgaacacct ctcagatctc ctacaccatc tactccacct gtggggcctt</p> <p>ctacattccc tcggtgttgc tcatcatcct atatggcgg atctaccggg ctgcccggaa</p> <p>cgcctcctg aatccacct cactctatgg gaagcgctc accacggccc acctcatcac</p> <p>aggctctg ccggctctgc tctgtctgct caactccagc ctccatgagg ggcactcgca</p> <p>ctcgggtggc tccccctct ttttcaacca cgtgaaaatc agcttctg acagtgcct</p> <p>ggaacgcaag aggattctg ctgctcgaga aaggaagcc actaaaatcc tgggcacat</p> <p>tctgggggct tttatcctg gctggtgctg cttctctctg gtgtctctg tctccccat</p> <p>ctgcccggac tcctgctgga tccacccggc gctctttgac tcttccact ggctaggcta</p> <p>tttaaaactc ctcataatc caataatcta cactgtgttt aatgaagagt ttcggcaagc</p> <p>ttttcagaaa attgtccctt tccggaaggc ctcctagtct tattcgatga ggtaagaaga</p>	Homo sapiens
6	129	5-HT1D Receptor	NP_000855.1	<p>MSPLNQAEG LPQEAASNRSL NATETSEAWD PRTLQALKIS LAVLSVITL ATVLSNAFVL</p> <p>TTILLTRKLH TPANYLIGSL ATTDLLVSIL VMPISIAVTI THTWNFGQIL CDIWLSSDIT</p> <p>CCTASILHLC VIALDRYWA I TDALEYSKRR TAGHAATMIA IVWALSICIS IPPLFWROAK</p>	Homo sapiens

7	130	5-HT1E Receptor	NM_000865	<p>           AQEEMSDCLV NTSQISYTIY STCGAFYIPS VLLIILYGR IYRAARNRIILN PPSLYGKRFET            TAHLITGSAG SSLCSLNSSL HEGHSHSAGS PLFFNHVKIK LADSALERKR I SAARERKAT            KILGIILGAF IICWLPFFV SLVLPICRDS CWIHPALFDF FTWLGYNLSL INPIIYTFVN            EEFRQAFQKI VFPRKAS            atcgaatgtt gagagaagca gtgctctgat ccagctcagg agaaaaagga gcggttccg A            agtgagactt ctggagccag ctggacgtgc cggtttgccc agtgcggcg gctgcacgc            accgtccaca agagtctcag tcgcccaggc tggagtgcag cagcacagtc tcacctcatt            gcaacctccg cttcccgggt tcgcggttc tcgcctcag cttcctagta gctgggattg            caggcactca ccaccatgcc cggctaattt ttgaaattt tagtgagac gggatttcac            catgttgccc atgtgtgtct tgaacccccg acctgggatg attcgccgc cteggcctcc            caaagtgtg gaattacagg cgaaccttca ctcaagaaga atgtgtggt ccttccctt            accaacagaa aatggaacac aagagaccac atagctgaac aaattatagc ctcttaca            gtgagaaacc ttcgaggcta catagtcttc agcaaaagga aaataaccaa cagcttctcc            acagtgtaga ctgaacaag gaaacatga acatcacaaa ctgtaccaca gaggccagca            tggctataag acccaagacc atcactgaga agatgctcat ttgcatgact ctggtgtgca            tcaccacccct caccacgttg ctgaacttg gttctgtgac ggctattggc accaccaaga            agctccacca gctgccaac tacctaattc agtctgtgac cgtgacggag ctctgtgtg            cagtgtcgt catgcccctg agcatcatct acatgtcat ggtcgctgg aagctgtggt            atttctctg tgaggtgtg ctgagtgtg acatgacctg ctgcacctg tccatcctcc            acctctgtg cattgccctg gacaggtact gggccatcac caatgtatt gaatacgcca            ggaagaggac ggcaagagg gccgctga tgatccttac cgtctggacc atctccattt            tcattccat gccctctg ttctggagaa gccacgccc cctaaagcct cccctagtc            agtgcacct ccagcacgac catgttatct acacattta ctccacgtg ggtgcgtttt            atatccctt gactttgata ctgattctct attacggat ttaccacgc gccaaagacc            ttaccagaa aaggggatca agtcggcact taagcaacag aagcacagat agccagaatt            ctttgtcaag ttgtaaactt acacagactt tctgtgtgc tgacttctcc acctcagacc            ctaccacaga gttgaaaaa gttccatgctt ccacaggat ccccccttc gacaaatgatc            tagatcacc aggaagacgt cagcagatct ctgacccag ggaacggaag gcagcacgca            tctgggggt gattctgggt gcattcattt tctctggtt gccatttttc atcaaaagat            tgattgtgg tctgagcatc tacacgtgt cctcggaagt ggcgacctt ctgacgtggc            tcggttatgt gaattctctg atcaaccctc tgctctatc gagttttaa gaagacttta            agctggcttt taaaagctc attagatgcc gagagcatac tttagactga aaaagctaaa            aggcacgact tttccagag cctcatgagt ggatggggg aaggggtgca acttattaat            tctgaaacat acttggttca ggagagtttg taagtatgt tggcttctgt tcttgtttg            ttgtttgtt ttgttctgtt ttgtttgagg attgttattt ggcgtgctgt ttctacctc            tggctttatc tgtgatacat aatttcaat aaacattatc atacaaaaa aaaaaaaa            aaaaaaaa         </p>	Homo sapiens
8	130	5-HT1E Receptor	NP_000856.1	<p>           MNITNCTTEA SMAIRPKTIT EKMLICMTLV VITTLTTLN LAVIMAIGTT KKLHPANYL P            ICSLAVTDLL VAVLVMPLSI IYIVMDRWKL GYFLCEVWLS VDMTCCTCSI LHLCVIALDR            YWAITNAIEY ARKRTAKRAA LMILTWTIS IFISMPPLEW RSHRLSPPP SQCTIQHDHV            IYTIYSTLGA FYIPLTLLI LYRIYHAAK SLYQKRGSSR HLSNRSTDSQ NSFASCKLTQ         </p>	Homo sapiens

9	131	5-HT1F Receptor	NM_000866	TFCVSDFTS DPTTEFEKEFH ASIRIPFFDN DLDPGERQQ ISSTRERKAA RILGLILGAF ILSWLPFFIK ELIVGLSIYT VSSEVADFLT WLGYNLSLIN PLYTSFNEF FKLAFFKKLIR CREHT	atggatttct taaattcatc tgatcaaaac ttgacctcag aggaactgtt aaacagaatg A ccatccaaaa ttctgtgtgc cctcactctg tctgggtgg cactgatgac aacaactatc aactcccttg tgatcgctgc aattattgtg acccggaagc tgcaccatcc agccaattat ttaaatttgtt ccttgagcag cacagatttt atggggcaag tggctgtga cctttcagc attgtgtata ttgtgagaga gagctggatt atggggcaag tggctgtga cctttcagc agtgttgaca ttacctgctg cactgctcc atctgcatc tctcagctat agctttggat cggtatcgag caatcacaga tgctgttgag tatgccagga aaaggactcc aaagcatgct ggcattatga ttacaatagt ttggattata tctgttttta tctctatgcc tctctatc tggaggcacc aaggaactag cagagatgat gaatgcatca tcaagcacga ccacattgtt tccaccattt actcaacatt tggagctttc tacatccac tggcattgat ttgatcctt tactacaaaa tatatagagc agcaaaagaca ttataccaca agagacaagc agtaggatt gcaaaggagg agtgaaatgg ccaagtcctt ttggagagtg gtgagaaaaag cactaaaaatca gtttccacat cctatgtact agaaaagtct ttatctgacc catcaacaga ctttgataaaa attcatagca cagtgaagag tctcaggtct gaattcaagc atgagaaatc ttggagaagg caaaagatct caggtacaag agaacggaaa gcagccacta ccttgggatt aatcttgggt gcatttggtaa tatgttggct tctttttttt gtaaaagaat tagttgttaa tgcctgtgac aaatgtaaaa ttctggaaga aatgtccaat ttttggcat ggcttgggta tctcaattcc cttataaaatc cactgattta cacaatcttt aatgaagact tcaagaaaaagc attccaaaaag cttgtgcgat gtcgatgtta g	Homo sapiens
10	131	5-HT1F Receptor	NP_000857.1	LICSLAVTDF LVAIVMPFS PSKILVSLTL SGLALMTTII NSLVIAAIIV TRKLHPANY P RYRAITDAVE YARKRTPKHA GIMITIVII SVFISNPPLF WRHQGTSRDD ECIKHDHIV STIYSTFGAF YIPLALILIL YKIYRAKT LYHKRQASRI AKEEVNGQVL LESGEKSTKS VSTSYVLEKS LSDPSTDFDK IHSTVRSLSR EFKEKSWRR QKISGTREK AATIGLILG AFVICWLPFF VKELVNVNCD KCKISEMSN FLAWLGYLNS LINPLIYTIF NEDEKKAFOK LVRRC	gaaattcgggt gagccagctc cgggagaaca gcatgtacac cagcctcagt gttacagagt A gtgggtacat caaggtgaat ggtgagcaga aactataacc tgttagtcct tctacacctc atctgtctaca agttctggct tagacatgga tattctttgt gaagaaaaata cttctttgag ctcaactacg aactccctaa tgcaattaaa tgatgacacc aggtcttaca gtaatgactt taactctgga gaagctaaca cttctgatgc atttaactgg acagtcgact ctgaaaaatcg aaccacactt tctgtggaag ggtgccttc accgtcgtgt cttcctttac ttcatctcca ggaaaaaac tggctgtgctt tactgacagc cgtatgatt attctaacta ttgctggaaa catactcgtc atcatggcag tgtccctaga gaaaagctg cagaatgcca ccaactattt cctgatgtca cttgccatag ctgatatgct gctgggtttc cttgtcatgc ccgtgtccat gttaaccatc ctgtatgggt accggtggcc tctgcgagc aagctttgtg cagctgtgat ttacctggac gtgtctttct ccacggcctc catcatgcac cttcgacca tctcgctgga ccgctacgct gccatccaga atcccatcca ccacagccgc ttcaactcca gaactaaggc	Homo sapiens
11	132	5-HT2A Receptor	NM_000621	gaaattcgggt gagccagctc cgggagaaca gcatgtacac cagcctcagt gttacagagt A gtgggtacat caaggtgaat ggtgagcaga aactataacc tgttagtcct tctacacctc atctgtctaca agttctggct tagacatgga tattctttgt gaagaaaaata cttctttgag ctcaactacg aactccctaa tgcaattaaa tgatgacacc aggtcttaca gtaatgactt taactctgga gaagctaaca cttctgatgc atttaactgg acagtcgact ctgaaaaatcg aaccacactt tctgtggaag ggtgccttc accgtcgtgt cttcctttac ttcatctcca ggaaaaaac tggctgtgctt tactgacagc cgtatgatt attctaacta ttgctggaaa catactcgtc atcatggcag tgtccctaga gaaaagctg cagaatgcca ccaactattt cctgatgtca cttgccatag ctgatatgct gctgggtttc cttgtcatgc ccgtgtccat gttaaccatc ctgtatgggt accggtggcc tctgcgagc aagctttgtg cagctgtgat ttacctggac gtgtctttct ccacggcctc catcatgcac cttcgacca tctcgctgga ccgctacgct gccatccaga atcccatcca ccacagccgc ttcaactcca gaactaaggc	Homo sapiens	

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12

NP\_000612.1  
5-HT2A  
Receptor
 NP\_000612.1 MDILCENTS LSSTNSLMQ INDDTRLYSN DFNSGEANTS DAFNWTVDSE NRTNLSCEG P  
 LSPSCLSLH LQKNWSALL TAVIILITIA GNILVIMAVS LEKKLQATN YFLMSLAID
Homo  
sapiens

13	5-HT2B Receptor	NM_000867	<p>MLGLFVMPV SMLTILGYR WPLPSKLCV WIYLDVLFST ASIMHLCAIS LDRYVAIQNP  IHHSRENSRT KAFKILIAW TISVGISMPI PVFGLQDDSK VFKEGSCLLA DDNEFLIGSF  VSFFIPLTIM VITYELTIKS LQKEATLCVS LFVWMCPPF ITNIMAVICK ESCNEDVIGA  REPGSYTGRR TMOQISNEQK ACKVLGIVFF LFFVMWCPFF FSRVYQCYK ENKKPLQLIL VNTIPALAYK  LLNVFWIGY LSSAVNPLVY TLENKTYRSA FSRVYQCYK ENKKPLQLIL VNTIPALAYK  SSQLQMGQKK NSKQDAKTTD NDCSMVALGK QHSEAEKVC V</p> <p>tactaaccat gctgaccact gttcggaacg ggattgaatc acagaaaaa agcaaatggc A  tctctcttac agagtgtctg aacttcaaaag cacaattcct gagcacattt tgcagagcac  ctttgttcac gttatctctt ctaactggtc tggattacag acagaaatcaa taccagagga  aatgaaacag attgttgagg aacagggaat taaactgcac tgggcagctc tctgtact  catggtgata ataccacaa ttggtggaaa tacccttggtt attctggctg tttcactgga  gaagaagctg cagtatgcta ctaattactt tctaattgctc ttggcgggtg ctgatttgct  ggttggttg ttgtgatgc caattgccct ctggacaata atgtttgagg ctatgtggcc  ctcccaactt gttctatgct ctgcctgggtt attcttgac gttctctttt caaccgcac  catcatgcat ctctgtgcca ttctagtga tctgtacata gccatcaaaa agccaatcca  ggccaatcaa tataactcac gggctacagc attacagtgg tgtggttaat  ttcaataggc attgccattc cagtcctcat taaagggata gagactgatg tggacaaccc  aaacaatatc acttgtgtgc tgacaaaagg acgttttggtc gatttcagtc tctttggtc  actggctgcc ttcttcacac ctcttgcaat tatgattgtc acctacttc tcaatatcca  tgctttacag aagaaggctt acttagtcaa aaacaagcca cctcaacgcc taacatgggtt  gactgtgtct acagtgttcc aaaggatga aacacctgc tctgcacgg aaagggtggc  aatgctggat ggttctcgaa aggacaaggc tctgccaac tcagggtgatg aaacacttat  gcgaagaaca tccacaattg ggaataaagt agtgcagacc atttccaacg aacagagagc  ctcaaggctc ctagggttg ttgttttctt ctttttgctt atgtgtgtc cttctttat  tacaatatata actttagttt tatgtgattc ctgtaaccaa actactctcc aaatgctcct  ggagatatct gtgtgatag gctatgttc ctacaggatg aatcctttgg tctacacct  cttcaataag acatttcggg atgcatttg ccgatatatc acctgcaatt accggggccac  aaagtcagta aaaaactctca gaaaacgctc cagtaagatc tacttccgga atccaatggc  agagaactct aggtttttca agaaacatgg aattcgaaat gggattaaac ctgccatgta  ccagagtcca atgaggtccc gaagttcaac cattcagctt tcaatcaatca ttctactaga  tacgcttctc ctcactgaaa atgaaggatga caaaactgaa gagcaagtta gttatgtata  gcagaactgg cagttgtcat caaacataat gatgagtaag atgatgaatg agatgtaaat  gtgccagaa tatattatat aaagaatttt atgtcatata tcaaatcatc tcttaacct  aagatgtaag tattaagaat atctaatttt cctaatttgg acaagatttat tccatgagga  aaataatttt atatagctac aaatgaaaac aatccagcac tctggttaaa ttttaaggta  ttcgaatgaa ataaagtcaa atcaataaat ttcagggtctt aaaaaaaaa</p>	Homo sapiens
14	5-HT2B Receptor	NP_000858.1	<p>MALSYRVSEL QSTIPEHIQ STFVHVISSN WSGLOTESIP EEMKQIVEEQ GNKLHWAALL P  ILMVIPTIG GNTLVILAVS LEKKLQYATN YFLMSLAVAD LTVGLFVMPI ALLTIMFEAM  WPLPLVLCPA WFLDVLFT ASIMHLCAIS VDRYIAIKKP IQANQYNSRA TAFIKITVW  LISIGIAIPV PIKGIETDND NPNNTCVLT KERGFDEMLF GSIAAFFTPL AIMIVTYFLT  IHALQKKAYL VKNKPPQRLT WLTVTSTVFOR DETPCSSPEK VAMLDGSRKD KALPNSGDET</p>	Homo sapiens



15	134	5-HT2C Receptor	nm_000868	<p>LMRRTSTIGK KSVQTSISNEQ RASKVLGIVF FLFLIMWCPF FITNITVLVC DSCNQTTLQM  LLEIFVWIGY VSSGWNPLVY TLFNKTRFDA FGRYITCNRYR ATKSVKTLRK RRSKIYFRNP  MAENSKFFKK HGIRNGINPA MYQSPMRLRS STIQSSSIIL LDILLTENE GDKTEEQVSY  V</p> <p>accgcgcga ggtaggcgct ctggtgcttg cggaggacgc ttccttcctc agatgcaccg A  atcttcocga tactgccttt ggagcgcta gattgctagc ctggtcgtct ccattggcct sapiens  gccttgcccc ttacctgccg attgcatact aactcttctt ctgtctgtac atcgttgtctg  tcggagtcgt cgcgctcgtc gtggcgctcg tctgatggcc ttcgtccgtt tagagttagtg  tagttagtta ggggccaaacg aagaagaaag aagacgcgat tagtgcagag atgctggagg  tggtcagtta ctaagctaga gtaagatagc ggagcgaaa gagccaaacc tagccggggg  gcgcacggtc acccaaggga ggtcgactcg ccggcgcttc ctatcgccg gagctccctc  cattcctctc cctccgcga ggcgcgaggt tgcggcgcg agcgagcg agtcagcgcg  accgactgcc gcgggctccg ctggcgaggt gcagccgagt ccgtttctcg tctagctgcc  gccgcggcga ccgctgcctg gtcttctcc cggacgctag tgggttatca gctaacaccc  gcgagcatct ataacatagg ccaactgacg ccatccttca aaacaacta aaggatgata  tgatgaacct agcctgttaa ttctgtcttc tcaattttaa actttggttg cttaagactg  aagcaatcat ggtgaacctg aggaatgcgg tgcattcatt cctgtgcac ctaattggcc  tattggtttg gcaatgtgat atttctgtga gccagtagc agctatagta actgacattt  tcaataacct cgatggtgga cgcttcaaat tcccagacgg ggtacaaaac tggccagcac  tttcaaatcgt catcataata atcatgacaa taggtggcaa ctatccttg atcatggcag  taagcatgga aaagaaactg cacaatgcca ccaattactt cttaatgtcc ctgaccattg  ctgatatgct agtgggacta ctgtgcacg cctgtctctc cctggcaatc ctttatgatt  atgtctggcc actacctaga tatttgtgct ccgtctggat tcttttagat gttttatttt  caacagcgtc catcatgac ctctgcgcta tatcgctgga tcggtatgta gcaatacgt  atcctattga gcatagcctg ttcaattcgc gactaaggc catcatgaag attgctattg  tttgggcaat ttctataggt gtatcagttc ctatcctgt gattggactg agggacgaag  aaaagggtgt cgtgaacaac acgacgtgcg tgctcaacga cccaaatttc gttcttattg  ggtccttcgt agctttcttc ataccgctga cgattatggt gattacgtat tgcctgacca  tctacgttct gcgcgacaa gctttgtagt tactgcacgg ccacaccgag gaaccgcctg  gactaagtct ggatttctcg aagtgcgtga agaggaatac ggccgaggaa gagaactctg  caaacccctaa ccaagaccag aacgcacgcc gaagaaagaa agtccttggg attgttttct  gcaccatgca ggctatcaac atgaaagaa agcttcgaa agtccttggg attgttttct  ttgtgtttct gatcatgtgg tgccatttt tcattaccaa tattctgtct gttctttgtg  agaagtcctg taaccaaag ctcatggaa agcttctgaa tgtgtttgtt tggattggct  atgtttgttc aggaatcaat cctctggtgt atactctgtt caacaaaatt taccgaaggg  cattctccaa ctatttgcgt tgcaattata aggtagagaa aaagcctcct gtcaggcaga  ttccaagagt tgcgcgcaat gctttgtctg ggaggagct taatgttaac atttatcgcc  ataccaatga accggtgatc gagaaagcca gtgacaatga gcccggtata gagatgcaag  ttgagaattt agagttacca gtaaatccct ccagttggtt tagcgaaagg attagcagtg  tgtgagaaag aacagcacag tcttttccca cggtaacagc tacatatgta ggaataattt  cttctttaat tttctgtgtg gtcttaacta atgtaataat tctgtctgta aaaaagtgtt</p>
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cctcaagtgt tgtgctattc gtaagtctg tgcagtttgg tatgaaacaa atatactcat  
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agtccatgtg ataattgtaa aggtgatgaa ttacatca acaaatcat tttgatgtat  
tattatata gtatatctgt gtaagacacg tgccttatat tgccttatat tttttctgt  
aattcttct ctttgtcaaa tggattttt tgcaaatgtt tgtcttattc

16	134	5-HT2C Receptor	NP_000859.1	<p> c5aattcctg tatgttatcc actacaggtt ttatgagact tcctattaat ttattaaatt  tattaaatgt tgaaaaaaa aaaaaaaaaa aaaaa  MVNLRNAVHS FLVHLIGLIV WQCDISVSPV AAIVTDIFNT SDGGRFKFPD GVQNWPAISI P  VIIIIMTIGG NILVIMAVSM EKKLHNATNY FILSLAIADM LVGLLVMPLS LLAIFYDVW  PLPRYLCPVW ISLDVLFSTA SIMHLCALSL DRYVAIRNPI EHSRFSRTEK AIMKIAIWA  ISIGSVPIIP VIGLRDEKV FVNNTTCVLN DFNEVLISGF VAFFIPLTIM VITYCLTIYV  LRRQALMLLH GHTEEPPLS LDFLKCKCRN TAEENSANP NQDNARRRK KKERPRGTM  QAINNERKAS KVLGIVFFVF LIMWCPFFIT NILSVLCEKS CQKIMEKLL NVFVWIGYVC  SGINPLVYTL FNKIYRRAFS NYLRCNYKVE KKPPVRQIPR VAATALS GRE LNVNIYRHTN  EPVIEKASDN EPGIEMQVEN LELPNPSSV VSEISSV </p>	Homo sapiens
17	136	5-HT4 Receptor	NM_000870	<p> cggtagcttat ttctgtaat ggacaaactt gatgctaatg tgagttctga ggagggttct A  gggtcagtggt agaaggtggt gctgctcacg ttctctctga cggttatcct gatggccatc  ttggggaacc tgctggtgat ggtggctgtg tgctgggaca ggcagctcag gaaaaataaaa  acaaattatt tcaattgtatc tcttgctttt gcggatctgc tggtttcggt gctggtgatg  ccctttggtg ccattgagct ggttcaagac atctggattt atggggaggt gttttgtctt  gttcggacat ctctggacgt cctgctcaca acggcatcga ttttcacct gtgctgcat  tctctggata ggtattacgc catctgctgc cagccttttg tctataggaa caagatgacc  cctctgcgca tgcattaat gctgggaggtc tgctgggtca tccccacgtt tattctttt  ctccctataa tgcaaggctg gaataacatt ggcataatg atttgataga aaagaggaag  ttcaaccaga actctaaact tactgtactgt gtcttcattg tcaacaagcc ctacgccatc  acctgctctg tggtagcctt ctacatccca ttctcctca tgggtgctgc ctattaccgc  atctatgtca cagctaaagga gcattgccat cagatccaga tgttacaacg ggcaggagcc  tctctcgaga gcaggcctca gtcggcagac cagcatagca ctcatcgcat gaggacagag  accaaagcag ccaagaccct gtgcatcctc atgggttgct tctgctctctg ctgggcacca  ttctttgtca ccaatattgt ggtacctttc atagactaca ctgtccctgg gcagggtgtg  actgctttcc tctggctcgg ctatatcaat tccgggttga acccttttct ctacgccctc  ttgaataagt cttttagacg tgccttctc atcatcctct gctgtgatga tgagcgctac  cgaagacctt ccattctggg ccagactgtc cttgttcaa ccacaacct taatggatcc  acacatgtac taaggatgc agtggagtgt ggtggccagt gggagagtca gtgtaccccg  ccagcaactt ctctttggt ggtgctcag ccagtgaca cttaggcccc tgggacaatg  acccagaaga cagccatgcc tccgaaagag ggcaggtcc taagctgctg cttgtgcgcg  actgcacccg gcattctctt cactgagcg tttcgtccg aaccgggtgc  tcgctggg </p>	Homo sapiens
18	136	5-HT4 Receptor	NP_000861.1	<p> MDKLDANVSS EEGFGSVEKV VLLTFLSTVI LMAILGNLIV MVAVCWDRQL RKIKTNYFIV P  SLAFADLLVS VLVMPFGAIE IVQDIWIYGE VFCLVTSLD VLLTASIFH LCCISLDTRY  AICCOPLVYR NKMTPLRIAL MLGGCWVPT FISFLPMQG WNNIGIIDLI EKRKENQNSN  STYCVFMVVK PYAITCSWA FYIPFLMLV AYRIYVTAK EHAHQIOMLO RAGASSES RP  QSADQHSRHR MRTETKAAT LCIIIMGCFCI CWAPFFVTNI VDPFIDYTP GQVWTAFLWL  GYINSGLNPF LYAFINKSFR RAFLIILCCD DERYRRPSIL GQTVPCSTTT INGSTHVLRD  AVECGGQWES QCHPPATSPL VAAQPSDT </p>	Homo sapiens
19	138	5-HT6	NM_000871	<p> cccgagagcg cccattcacc cccctcacc acctccccgc gttccccactt ccccgcaactc A </p>	Homo

Receptor

sapiens

tgaccggcc ggacggccct cccctatctt gccggccggcc cctccaggg ggctctgctc  
 ccacccagg gagcccatcc gacctctgct tgacttccc cgccttctt caggggcctc  
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 tccccaggg cgcccaata gccacactgt gtccctctgt agtcgccgc cctgacctc  
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 cgctgctgat cgcgtctatc tgcaactcgc cgcgctgcg caaacgtcc aacttcttc  
 tgggtgcgt cttaacgtct gacctgatg tggggtcgt ggtgatgcg ccggccatgc  
 tgaacgcgt gtacgggcgc tgggtgctg gcgcggcct ctgctgctc tggaccgct  
 tcgacgtgat gtgctgcagc gccctccatc tcaacctctg cctcatcagc ctggaccgct  
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 gggctggcca atggggagct ggattagca gaaccagac cctgagctc tgggccagct  
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 gcagagctga cccctgctg ccatctccag gcccttacc tgcagggatc atagctgact  
 caga

20

138

5-HT6

Receptor

NP\_000862.1

P

Homo

sapiens

NP000862.1 MVPEPGPTAN STPAWGAGPP SAPGSGWVA AALCVVIALT AAANSLIAL ICTQPALRNT  
 SNFFLVSLFT SLMVGLVVM PPAMINALYG RWLARGLCI LMTAFDVMCC SASILNLCI  
 SLDRYLLIIS PLRYKLRTMP LRALALVIGA WSLAALASF LLLGWHELG HARPPVPGQC  
 RLLASLPFVL VASGLTFFLP SGAICFTYCR ILLAARKQAV QVASLTGMA SQASETLPV  
 RTPRPGVESA DSRRLATKHS RKALKASLTL GILLGMFFVT WLPFFVANIV QAVDCISPG  
 LFDVLTWLG CNSTMNPIY PLFMRDEKRA LGRFLPCPRC PRERQASIAS PSRLTSHSGP  
 RPLSLQQVL PLPLPDSDS DSDAGSGSS GLRLTAQLL PGEATQDPPL PTRAAAVNF  
 FNIDPAEPEL RPHPLGIPN

21	139	5-HT7 Receptor	NM_000872	ccatgggacg cggcacacgg cggcgcgatg atggacgtta acagcagcgg ccgcccggac A ctctacggc acctccgctc ttctcttctg ccagaaagtgg ggcgcgggct gcccacttg agccccgacg gtggcgccga cccggtcgcg ggtcctctgg cgcgcacct gctgagcgag gtgacagcca gcccgccgccc cactggggac ggcggcccg acaatgcctc cggctgtggg gaacagatca actacggcag agtcgagaaa gttgtgatcg gctccatctc gacgtcctc acgtgctga cgtcgcggg caactgcctg gttgtgatct ggtgtgctt cgtcaagaag ctcggccagc cctccaaacta cctgacgtg tccctggcg tggcgacct ctcggtggct gtggcggtca tggccttctg cagcgtcacc gacctacatg ggggcaagt gatcttggg cacttttct gtaatgtctt catcgccatg gacgtcatgt gctgcacgg ctcgacatg acctgtgcg tgatcagcat tgacaggtac cttgggatca caaggccct cacatacct gtgaggcaga atgggaaatg catggcgaag atgattctct ccgtctggct tcttccgccc tccatcacct tacctccact ctttgatgg gctcagaatg taaatgatga taaggtgtg ttgatcagcc aggaactttg ctatacatt tactctaccg cagtggcatt ttatatcccc atgtccgtca tgcttttcat gtactaccag atttacaagg ctgccaggaa gagtgtgccc aaacacaaat ttcttgctt cctcagatg gagccagaca cgtcatcgc cctgaatggc atagtgaagc tccagaagga ggtggaagag tgtgcaaac ttcgagact cctcaagcat gaaaggaaaa acatctccat ctttaagcga gaacagaaa cagccaccac cctggggatc atcgtcgggg cctttaccgt gtgctggctg ccaattttcc tctctcgac agccagaccc ttcatctgtg gcacttctct cagctgcac ccaattgtgg tggagaggac atttctgtg ctaggctatg caaactctct cattaacct ttatatatg ccttctcaa ccgggacctg aggaccacct atcgcagcct gctccagtgc cagtaccgga atatacacc gaagctctca gctgcaggca tgcataagc cctgaagctt gctgagaggc cagagagacc tgagttgtg ctacaaaaatg ctgactactg tagaaaaaa ggtcatgatt catgattgaa agcagaacaa tggag	Homo sapiens
22	139	5-HT7 Receptor	NP_000863.1	MDVNSSGRP DLYGHLRSFL LPEVGRGLPD LSPDGGADPV AGSWAPHLLS EVTASAPPTW P DAPPDNASGC GEQINYGRVE KVVIGSILTL ITLLTIAGNC LVWISVCFVK KLRQPSNYLI VSLALADLSV AVAVMPEFVSV TDLIGGKWIF GHFFCNVFIA MDVMCCTASI MTLCVISIDR YLGITRPLTY PVRQNGKDMA KMILSVWLLS ASITLPLPLF WAQNVNDDKV CLISQDFGYT IYSTAVAFYI PMSVLMFMY QIYKAARKSA AKHKFPFPR VEPDSVIALN GIVKLQKEVE ECANLSRLK HERKNISIFK REQKAATTIG IIVGAFVVCW LPFFLLSTAR PFICGTSCSC IPLWVERTEL WLGYNANSLIN PFIYAFENRD LRITYRSLLQ CQYRNINRKL SAAGMHEALK LAERPERPEF VLQVADYCRK KGHDS atgagtgtca gaagtgtgaa ggtgctctgt tctgaatccc agagcctcct ctccctctgt A gaggctggca ggtgaggaag ggtttaacct cactggaagg aatccctgga ctagcggct gctgaaggcg tcgaggtgtg ggggcacttg gacagaacag tcaggacagc gggagctctg ccagcttttg tgaccttggg ccgggctggg agcgtgctgg cgggagccgg aggaactatga gctgccgcgc gttgtccaga gccagccca gccctacgcg cgcggcccg agctctgttc cctggaaact tgggcactgc ctctgggacc cctgcggccc agcaggcagg atggtgcttg cctcgtgccc ctggtgccc gctgctgat gtgccagcc tgtgccgccc atgccgccc ccatctcagc ttccaggcc gctacatcg gctcaggtt gctcagccc ctggtctctg tgccccggaa cgtgctggtg atctggcgcg tgaaggtgaa ccaggcgctg cgggatgcca	Homo sapiens
23	272	Adenosine A1 Receptor	NM_000674		Homo sapiens

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Receptor	Adenosine A2a Receptor	NM_000675	273	225
LVIPLAILIN IGRQTYFHTC LMVACPVLIL TQSSILALLA IAVDRYLRVK IPLRYKMVVT	Adenosine A2a Receptor	NM_000675	273	225
PRRAAVAIAG CWILSFVVGL TPFEGWNNLS AVERAWAANG SMGEPVTKCE FEKVISMMEYM				
VYFNFFVWVL PPLLMLVLIY LEVFYLIRKQ LNKKVSASSG DPQKYKGKEL KIAKSIALIL				
FLFALSWLPL HILNCITLFC PSCHKPSILT YIAIFLTHGN SAMNPIVYAF RIQKFRVTFEL				
KIWNDFHRCQ PAPPIDEDLP EERPD				
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26	273	Adenosine A2a Receptor	NP_000666.2	MPIMSSVYI TVELIAI <del>AV</del> LA ILGNVLVCWA VMNSNLQNV TNYFVSVSLAA ADIAVGVLA <del>I</del> P PFAITISTGF CAACHGCLFI ACFLVL <del>LT</del> QS SIFSL <del>LA</del> IAI DRYIAIRIPL RYNGLV <del>TG</del> TR AKGIIAICWV LSFAIGLTPM LGWNCGQPK EGRNHSQCG EGQVACLFED VWPNNVMYF NFFACVLVPL LMLGVYLRI FLAARRQLKQ MESQPLPGER ARSTLQKEVH AAKSLAIIVG LEFALCWLPLH IINCFTFFCP DCSHAPLWLM YLAIVLSHTN SVNPFYIAY RIREFRQ <del>TF</del> R KIIRSHVL <del>RQ</del> QEPFKAAGTS ARVLAHGS <del>D</del> GEQVSLRLNG HPFGVWANGS APHPER <del>PNG</del> YALGLVSGS AQESQNTGL PDVELLSHEL KGVCEPP <del>GL</del> DDPLAQDGAG VS	Homo sapiens
27	274	Adenosine A2b Receptor	NM_000676	gggcaatttg ttagttatcc gccgccacca agacgcggca cggcgccctgg accggagggg A ccccgcg <del>cg</del> ggcggaactt tgggctcggg cgagtgggtg gtgctccgcc cagccccaga cgggcggg <del>cg</del> cgcgggcccc agccccgagg ctcagaagcg gcaggcgga <del>g</del> gcgcgggtccg gtccccgcca ccagcgc <del>ccc</del> ccatgccccg cgggtctcac gcggtctgcc ctcgcccg <del>gc</del> ggccttcgg ggcgctatgg ccatgccccg cctggggcccc gctggccccg ccatgtctgct ggagacacag gacgcgtgt tagggggcgc ccggggcccc gagctgggtc atcgccgcgc tttcgggtggc gggcaacgtg ctggtgtgcg acgtggcgtt ggagctgggtc atcgccgcgc tttcgggtggc gggcaacgtg ctggtgtgcg ccgcgggtgg cacggcgaa <del>c</del> actctgcaga cgcgccaccaa ctacttcctg gtgtccctgg ctgcggccga cgtggccgtg gggctcttcc ccatccctt tgccatcacc atcagccctgg gcttctgcac tgacttctac ggctgcctct tccctgcctg cttcgtgtctg gtgtca <del>cgc</del> agagctccat cttcagcctt ctggccgtgg cagtcgcacag ataccctggcc atctgtgtcc cgctcaggt <del>a</del> taaaagt <del>ttg</del> gtcacgggga ccgagcaag aggggtcatt gctgtccctt gggtccctgc ctttggcatc ggattgactc cattcctggg gtggaacagt aaagacagt <del>g</del> ccaccaacaa ctgcacagaa ccctgggatg gaaccacgaa tgaaagctgc tgcctt <del>gtga</del> agtgtctctt tgagaatgtg gtccccatga gctacatggt atatttcaat ttctttgggt gtgttctgcc cccactgctt ataatgctgg tgatctacat taagatcttc ctggtggcct gcaggcagct tcagcgcact gagctgattg accactggag gaccacctc cagcgggaga tccatgcagc caagtcaactg gccatgattg tggggtattt tggcctgtgc tggttacctg tgcatgctgt taactgtgtc actcttttcc agccagctca gggtaaaaa <del>at</del> aagcccaagt gggcaatgaa tatggccatt cttctgtcac atgccaatc agttgtcaat cccattgtct atgcttaccg gaaccgagac ttccgctaca cttttcaca <del>a</del> aattatctcc aggtatcttc tctgccagc agatgtcaag agtgggaatg gtcaggctgg ggtacagcct gctctcggtg tgggctatg atctaggctc tgcctcttc caggagaaga tacaatcca caagaa <del>acaa</del> agaggacacg gctggttttc attgtgaaag atagctacac ctcacaa <del>gga</del> aatggactgc ctctcttgag cacttccctg gagctaccac gtatctagct aatatgtatg tgtcagtagt aggctccaag gattgacaaa tatatttatg atctattcag ctgctttttac tgtgtggatt atgccaacag cttgaatgga ttctaacaga ctcttttgtt tttaaaa <del>agt</del> tgccttgttt atggtggaaa attactgaaa ctattttact gtgaaacagt gtgaactatt ataatg <del>caaa</del> tactttttaa cttagaggga atggaaaaat aaaagtgtgac tgtactaaaa atg	Homo sapiens



28	274	Adenosine A2b Receptor	NP_000667.1	MLLETQDALY VALELVIAAL SVAGNVLVCA AVGTANTLIQT PTNYFLVSLA AADVAVGLFA P IPFAITISLG FCTDFYGCLE LACFVLVLTQ SSIFSLLAVA VDRYLAICVP LRYKSILVTGT RARGVIAVLW VLAFGIGLTP FLGWNKSDSA TNNCTEPWDG TTNESCCLVK CLFENVVPMMS YMYFNFPGC VLPPLLIMLV IYIKIFLVAC RQLQRTELMD HSRTTLQREI HAAKSLAMIV GIFALCWLPV HAVNCVTLFQ PAQGNKPKW ANMMAILLSH ANSVVNPIVY AYRNRDFRYT FKHIIISRYLL CQADVKSNG QAGVQPALGV GL	Homo sapiens
29	275	Adenosine A3 Receptor	NM_000677	atctttgtctg caaaggctgg gtatcggttg tgctcagcaa agcgtcaact cgtgcaagaa A cttagcagga atagtctctgg ctaaggtag gaggtgcca ccaaagtctc tttttgttc ctctgcttct ccggtttgcc tctttatcat gagatctttt tgctaagctg gcagaaagat tgcatagtca gtgcttccag ctctgtccc acctgacct gcactgtcct ctggttccctg aatgaatgaa ctctgatacc caatcttgct tctgtcttc tgagacctc tcatggctcc tctctgtct tttccatctt tttgtgaga gttctgagct ctgtacttcc tcttggtccc tctcacttcc tgaacacccc ctgaagaggg ttgcttatct tgatggaact caaaaagcca aaaagctgca ggcagagggc ttgaggacat ctgtttgggg aactaagagc agcagcactt tcagattcag tccatataga gctgtcctac agcattctgg aaacttgagg atgtgcgtg cataaagggg ctggaagtga cccacctgtg atgagccctt tctaaggaga aggtttcca agagatcacc ccaccagaaa aggtgaggaa tgagcaagtt gggaaattta gactgtcaat gcacatggac ctctgggaaag acgtctggcg agagctaggc ccactggccc tacagacgga tcttgctggc tcacctgtcc ctgtggaggt tccctggga aggcaagatg cccaacaaca gcactgctct gtcattggcc aatgttacct acatcaccat ggaattttc attggaactct gcgcatagt gggcaacgtg ctggtcatct gctgggtcaa gctgaacccc agcctgcaga ccaccacctt ctatttcatt gtctctctag cctgggtgta cattgctgtt ggggtgctgg tcatgacctt ggccattggt gtcagcctgg gcatcacaat ccacttctac agctgacctt ttatgacttg cctactgctt atctttaccc acgctccat catgtccttg ctggccatcg ctgtggaccg atacttgcg gtaagctta ccgtcagata caagagggtc accactcaca gaagaatatg gctggccctg ggcctttgct ggtgtgtgtc attcctgggt ggattgaccc ccatgtttgg ctggaacatg aaactgacct cagagtacca cagaaatgtc accttccctt catgccaatt tgtttccgtc atgagaatgg actacatggt atacttcagc ttcctcactt ggattttcat cccctgggtt gtcatgtgag ccatctatct tgacatcttt tacatcattc ggaacaaact cagctggaac ttatctaact ccaagagagc aggtgcattt tatggacggg agttcaagac ggctaagtcc ttgtttctgg tcttttctt gttgtctctg tcatggctgc ctttatctat cateactgc atcatctact ttaatggtga ggtaccacag cttgtgctgt acatgggcat cctgtgtcc catgccaact ccatgatgaa cctatcgtc tatgcctata aaataaagaa gttaaggaa acctacctt tgatcctcaa agcctgtgtg gtctgccatc cctctgattc ttggacaca agcattgaga agaattctga gtagttatcc atcagagatg actctgtctc attgaccttc agattcccca tcaacaaaaa cttgagggcc tgtatgcctg ggccaaggga tttttacatc cttgattact tccactagg tgggagcatc tccagtgtc cccaattata tctccccac tccactactc tcttctcca cttcatcttt tcttgtctt ttctctctaa ttcagtgttt tggaggcctg acctggggac aacgtattat tcatattatt gtctgttttc cttctccca atagaagaat aagtcattga gcctgaaggg tgcctagtgtg acttactgac aaaaggctct agttgggctg aacatgtgtg tgggtgtgac tcatttccat	Homo sapiens

30	275	Adenosine A3 NP_000668.1 Receptor	gcatattgtg aatgagcag agaacctgct ctggaggat gcctagaaga tgttgggaac agaagaaata aactgagttt aaggggact taaactgctg aattcacctg tggatgtttt tgaataaata aaagtaata g MPNNSTALS ANVTYITMEI FIGLCAIVGN VLVICVVKLN PSLQTTTFYF IVSLALADIA P VGLVMPPLAI VVSLGITHF YSCLFMTCLL LIFTHASIMS LLAIAVDRL RVKLTVRYKR VTTHRIWLA LGLCWLVSEFL VGLTPMFGWN MKLTSEYHRN VTFELSCQFVS VMRMDVMVYF SFLTWIFIL VMCALYLDI FYIIRNKLS NLSNSETGA FYGREFTAK SLEFLVLEFA LSWLPLSIIN CIIYFGEVP QLVLYMGILL SHANSMNPI VYAYKIKKFK ETYLLILKAC VCHPSDSL TSIEKNSE	Homo sapiens
31	309	Melanocortin NM_000529 2 Receptor (adrenocorti cotropic hormone) (MC2R)	atgaagcaca ttatcaact gtatgaaac atcaacaaca cagcaagaaa taattccgac A tgtctctctg tggttttgcc ggaggagata ttttcacaa tttccattgt tggagttttg gagaatctga tgcctctgct ggctgtgttc aagaataaga atctccaggc acccatgtac tttttcattc gtgcttggc catatctgat atgtctggga gcctatataa gatcttggaa aatatcctga tcattattgag aaacatgggc tatctcaagc cagctggcag ttttgaacc acagccgatg acatcatcga ctccctgttt gtcctctccc tgcttggtc catcttcagc ctgtctgtga ttgctgcgga ccgtacatc accatcttcc acgcatcggt gtaccacagc atcgtgacca tgcgcgcgac tgggtgtgtg ctacaggtca tctggacgtt ctgcacgggg actggcatca ccattgtgtat ctctctccat catgtgccc cagtgatcac ctccacgtc ctgttcccg tgatgtgtgt ttctacatc tgcctctatg tgcacatgtt cctctgtgtt cgatccaca ccaggaagat ctccacccc cccagagcca acatgaaagg ggcacatcaca ctgaccatcc tgcctgggtt ctctcatctc tgcctggccc ccttctgtct tcatgtctc ttgatgacat tctgcccag taacccctac tgcgcctgtt acatgtctct ctccaggtg aacggcatgt tgatcatgtg caatgcctc attgacccc tcatatagc ctccggagc ccagagctca ggaacgcatt caaaaagat atctctgca gcaggtactg gtag FFICSLAISD MGLSLYKILE NILIILRMG YLKPRGSFET TADDIIDSIF VLSLGSIFS LSVIAADRYI TIFHALRYHS IVTMRRTVV LVITWTFCTG TGITMVFIF HVPTVITFTS LFPLMLVFIL CLYVHMFLLA RSHTRKISTL PRANMKGAIT LTILLGVFIF CWAPFVLHVL LMTFCPSNPY CACVMSLFQV NGMLIMCNV IDPFIYAFRS PELRDAFKKM IFCSRYW	Homo sapiens
32	309	Melanocortin NP_000520.1 2 Receptor (adrenocorti cotropic hormone) (MC2R)	tcctgccgcg cgctcgttct gtgcccccg cgccgccacc gagggccgcg cgttgagatg A actttccgcg atctcctgag cgtcagtttc gagggacccc gcccgacag cagcgcaggg ggctccagcg cggcgccgcg cgggggcagc cgggcgccgc cgcccccctc ggaggccccc gcgtggcg gcgtgcgg gcgcgcgg gcgcgcgg gcgcgcgg gcgcgcgg gcgcgcgg ggcaggaca accgagctc cgcgggggag cgcgggagcg cgcgcgcgg cgcgcgcgg aatggcacg cgcccgctcg gggaactggt gtgagcgcg agggcgtggg cgtggcgctc ttcctggcag ccttcactc tatggccgtg gcaggtaac tgcctgtcat cctctcagt gcctgcaacc gccacctgca gaccgtcac aactattca tctggaacct ggcctggcc gacctgctgc tgagcgccac cgtactgccc ttctcgcca ccatggaggt tctggcctc tgggcctttg gccgcctt ctgcgacgta tgggcgcgg tggacgtgct gtgctgcag gcctccatcc tcagcctctg caccatctcc gtggaccggt acgtggcggt gcgccactca	Homo sapiens
33	376	Alpha 1d- nm_000678 adrenoceptor		Homo sapiens

34	Alpha 1d- adrenoceptor	NP_000669.1	376	Alpha 1b- adrenoceptor	NM_000679	377	Alpha 1b- adrenoceptor
	ctcaagtacc cagccatcat gaccgagcgc aaggcgccgc ccatacctggc cctgctctgg gtcgtagccc tgggtggtgtc cgtaggcccc ctgctgggct ggaaggagcc cgtgccccct gacgagcgct tctgcggtat caccgaggag gcgggctacg ctgtcttctc ctccgtgtgc tcctttacc tgcccatggc ggtcatcgtg gtcattgact gccgctgta cgtggtcgcg cgacgacca cgcgcagcct cgaggcagcc gtcaagcgcg agcgaggcaa ggctcccgag gtggtgctgc gcatacactg tgcgcgcgcg gccacgggcg ccgacgggcg gcacgcatg cgcagcgca agggccacac ctccgcgagc tgcctctccg tgcgctgct caagttctcc cgtgagaaga aagcgggcaa gactctggcc atcgtcgtgg gtgtcttctg gctcgtgctg ttccctttct tctttgtcct gccgctcgcc tcttcttcc cgcagctgaa gccatcgag ggcgtcttca aggtcatctt ctggctcgcc tacttcaaca gctgctgaa cccgctcctc taccctgtt ccagccgcga gttcaagcgc gcttctctcc gtctctcg ctgccaagtgc cgtcgtgccc ggcgccgcgc cctctcttgg cgtgtctacg gccaccactg gcgggctccc accagcgccc tgcgccagga ctgcgccccg agttcgggcg acgcgcccc cgagcgccc ctggccctca ccgcgctccc cgacccccgc ccggaacccc caggcacgcc cgagatgcag gctccggtcg ccagccgctg aaagccaccc agcgccttcc gcgagtgag gctgctggg ccgttccgga gaccacgac ccagctgcgc gccaaagtct cagcctgtc gcacaagatc cgcccgggg gcgcgcagcg cgcagaggca gctgtgcccc agcgtcaga ggtgaggct gtgtccctag gcgtccca caaggtggcc gaggcgccca cctgccaggc ctacgaattg gccgactaca gcaacctacg ggagaccgat atttaaggac ccagagcta ggcgcggag tgtgctgggc ttgggggtaa gggggaccag agaggcgggc tgggtgttcta agagcccccg tgcaaatcgg agacccggaa actgacagc gcagctgctc tgtgacatcc ctgaggaact gggcagagct tgaggctgga gcccttgaaa ggtgaaaaagt agtggggccc cctgctggac tcaggtgccc agaactctt tcttagaagg gagagctgc gggctccgtg gggccttttg ctcccaatcc ctatttgaga aacactgccc catctccat gccctgaacc ctgagtagac agccccaaag atggccagga aggcctgccc MTERDLSSV FEGRPDSSA GSSAGGGGG SAGGAAPSEG PAVGGVPVGA GGGGVVAG P SGEDNRSSAG EPGSAGAGD VNGTAAVGL VVSAQGVGVG VFLAAFILMA VAGNLLVILS VACNRHLQTV TNYFVNLAV ADLLSATVL PFSATMEVLG FWAFFRAFCV WAAAVDVLC TASILSLCTI SVDYVGVVRH SLKYPAMTE RKAAAILALL WVALVWVSVG PLLGWKEVP PDERFCGITE EAGYAVFSSV CSFYLPMAVI VMYCRVYV ARSTTRSLEA GVKRERKAS EVLRIHCRG AATGADGAHG MRSAGHTFR SLSVRLLEF SREKKAATL AIIVGVFVLC WPFFFVLPL GSLFPQLKPS EGVEKVFVWL GFNSCVNPL IYPCSSREFK RAFLRLRCQ CRRRRRRRPL WRVYGHWRP STSGLRQDCA PSSGDAPPGA PLALTALPDP DPEPPGTPM QAPVASRRKP PSAPREWRL GPFRPTTQL RAKVSSLSHK IRAGGAQRAE AACAAQSEVE AVSLGVPHEV AEGATCQAYE LADYSNLRET DI aggcaggaga cgtgctgcgg gctgggctgc ccgggggaga tgactcctgc caggaggcg A cctctgggaa gaagaccacg ggggaagcaa agtttcaggg cagctgagga gccttcgccc cagcccttcc gagcccaatc atccccagg ctatcgaggg cggactctaa gatgaatccc gacctggaca cgggccacaa cacatcagca cctgccccct ggggagagt gaaaaatgcc gaacttactg ccccacaa gacctcagc aactccacac tgccccagct ggacatcacc agggccatct ctgtggcct ggtgctgggc gccttcaccc cctttgccat cgtggggaac						

36	Alpha 1b- adrenoceptor	NP_000670.1	<p>atcctagtca tcttgtctgt ggctgtcaac cggcaactgc ggacgccac caactactc  attgtcaacc tggccatggc cgacctgtg ttgagcttca ccgtcctgc cttctcagcg  gccctagagg tgctcggtc ctgggtgctg gggcggtatc tctgtgacat ctgggcagcc  gtggatgtcc tgtgtgtcac agcgtccatt ctgagcctgt gcgccatctc catcgatcgc  tacatcgggg tgcgtactc tctgcagtat cccacgtgtg tcaccggag gaagcccatc  ttggcgctgc tcaagtgtctg ggtctgttc accgtcatct ccatcgggc tctcttggg  tggaaggagc cggcacccaa cgatgacaag gagtgcggg tcaccgaaga acccttctat  gccctcttct cctctctggg ctctcttac atccctctgg cgtcattct agtcatgtac  tgccgtgtct atatagtggc caagaaca accaagaacc tagagcgag agtcatgaag  gagatgtcca actccaagga gctgacctg aggtaccatt ccaagaact tcacgaggac  acccttagca gtaccaagg caagggccac aaccagga gtccatagc tgtcaactt  tttaagtctt ccagggaata gaaagcagct aagacgttgg gcatttgtgt cgtatgttc  atcttgtgt ggtaccctt cttcatcgt ctaccgttg gctccttgt ctcacacctg  aagcccccg acgcgtgtt caagtggtg tcttggtgg gctacttcaa cagctgcctc  aaccatca tctaccatg ctccagcaag gattcaagc gcgttctgt gcgcacctc  gggtgccagt gcgcggcg cggcgccgc gtggacgcg ggcgctgc tggagcctc gcagtcgcg  tgccctaca cctaccggc gtggacgcg cggcagctgc ctagcgga gccagcgag cctgcctcg  aggactgc tggacgacg cggcagctgc ctagcgga gccagcgag cctgcctcg  gcctgcga gcccggtc cctggggc ctagcgga gccagctga ctagtcgcg  ttccccagt ggaaggcg cggcgccct ctagcctgc cgcgcctga gcccccgcc  cgccggcg gccacgact gggccgctc ttcacctca agctcctga cgagcccgag  agccccgga ccgacggcg cggcagcaac ggagctgcg aggcggcg cgacgtggc  aacgggcagc cggcctcaa aagcaacat cccctggcg ccggcgagt ttaggggccc  cgtgcgagc tttcttccc tggggagga aacatcgtg ggggga  MNPDLDTGHN TSAPAHWGL KNAFTGPNQ TSSNSTLPQL DITRAISVGL VLGAFILFAI P Homo sapiens  VGNILVILSV ACNRHLRTP NYFIVNLAMA DLLSFTVLP FSAALEVLGY WVLGRIFCDI  WAAVDVLCCT ASILSICATS IDRYIGVRS LQYPTLVPR KAILALLSW VLSTVISIGP  LLGWKEPAPN DKECGVTEE PFYALFSSLG SFYIPLAVIL VMYCRVYIVA KRTTKNLEAG  VMKEMSNSKE LTLRIHSKNF HEDTSLSTKA KGHNPSSIA VKLFKFSREK KAAKTLGIVV  GMFILCWLPF FIALPLGSLF STLKPPDAVF KVFWLGYFN SCLNPIIYPC SSKEFKRAFV  RILGCQCRGR GRRRRRRRR LGGCAYTYRP WTRGGSLEERS QSRKDSLDDS GSCLSGSQRT  LPSASPSGY LGRGAPPPVE LCAFPEWKAP GALLSLPAPE PPGRRRRHDS GPLFTFKLLT  EPESPGTDGG ASNGCEAAA DVANGQPGFK SNMPLAPGQF  gaattccgaa tcatgtgcag aatcgtgaat cttecccccag ccaggacgaa taagacagcg A  cgaaaagca gattctcgta attctggaat tgcattgtgc aaggagtctc ctggatcttc  gcaccagct tcgggtaggg agggagtcg ggtcccgccg taggccagcc cggcaggtg  agagggtccc cggcagcccc gcgcgcccc ggcctatgct ttaatgccct gcccttcat  gtgacctct gaggttccc agggctggc aggttgttt ccaccccgcg cgcgcgtct  caccgccag caaacccacc tggcagggt cctccagcc gagaccttt gattcccgcc  tcccgcgct ccgctccgc gccagcccg gaggtggcc tggacagcg gacctgccc  ggccccggt gggaccatgg tgtttctctc gggaaatgct tccgacagct ccaactgcac</p>
37	Alpha 1c- adrenoceptor	NM_000680	<p>gaattccgaa tcatgtgcag aatcgtgaat cttecccccag ccaggacgaa taagacagcg A  cgaaaagca gattctcgta attctggaat tgcattgtgc aaggagtctc ctggatcttc  gcaccagct tcgggtaggg agggagtcg ggtcccgccg taggccagcc cggcaggtg  agagggtccc cggcagcccc gcgcgcccc ggcctatgct ttaatgccct gcccttcat  gtgacctct gaggttccc agggctggc aggttgttt ccaccccgcg cgcgcgtct  caccgccag caaacccacc tggcagggt cctccagcc gagaccttt gattcccgcc  tcccgcgct ccgctccgc gccagcccg gaggtggcc tggacagcg gacctgccc  ggccccggt gggaccatgg tgtttctctc gggaaatgct tccgacagct ccaactgcac</p>

38	Alpha 1c- adrenoceptor	NP_000671.1	<p> cgaaccgcg gacccgggtga acatttccaa ggcattctg ctccgggtga tcttgggggg  cctcattctt ttccgggggtgc tgggtaacat cctagtgtac ctctccgtag cctgtcacccg  acacctgcac tcaagtcaacgc actactacat cgtcaacctg gcggtggccg acctcctgct  cacctccacg gtgctgcctt tctccgccat cttcgaggtc ctaggctact ggccttccg  caggtcttc tgaacatct tgaacacatc tgaacacatc tgaacacatc tgaacacatc  gggctctgc atcatctcca tgaacacatc tgaacacatc tgaacacatc tgaacacatc  aaccatctgc acccagagga ggggtctctc ggggtctctc ggggtctctc ggggtctctc  ggtcatatcc attggacccc tgggtctctc ggggtctctc ggggtctctc ggggtctctc  ctgccagatc aacgaggagc cgggtctctc ggggtctctc ggggtctctc ggggtctctc  gcctctggcc atcatctctg tcatgtactg cgggtctctc ggggtctctc ggggtctctc  ccgggctc aagtctggcc tcaagaccga caagtctctc ggggtctctc ggggtctctc  catccatcgg aaaaacgccc cggcaggagc cggcaggagc cggcaggagc cggcaggagc  gcattctca gtgaggctcc tcaagtctc cgggtctctc ggggtctctc ggggtctctc  catcgtggtc ggtgctctc agcctctga acccctctc ataccatgc tccagccaag agttcaaaa  gtcttcttc cctgatttca acccctctc ataccatgc tccagccaag agttcaaaa  atatctaac agctgcatca acccctctc ataccatgc tccagccaag agttcaaaa  ggcctttcag aatgtcttga gaatccagtg tctccgaga aagcagctct ccaaacatgc  cctgggtac accctgcacc cggcaggcca ggcgtctgga ggcgaacaca aggcagctgt  gcgcatccc gtgggtacaa gagagacctt ctacaggatc tccaagacgg atggtctgtg  tgaatggaaa ttttctctt ccatgccccg tggatctgag aagtaaaagc ttttggag tctgctgctg  ccaatctcc tgaaccacag cccgggtgag aagtaaaagc ttttggag tctgctgctg  tgtagggccc tcaaccccca gcttgacaa gaacatcaa gttccaaaca ttaaggtcca  caccatctcc ctcaagtga acggggagga agtctaggac agaaagatg cagaggaaaag  gggaataatc ttaggtacc ccccacttc cttctcgaa ggcagctct tcttggagga  caagacagga ccaatcaaa agggacctg ctgggaatgg ggtgggtgt agacccaact  catcaggcag cgggtaggc acagggaag cctgcagct aatgcttct tgggtcactt gtgcccactt  aatgatacgg aacagcatt cctgcagct aatgcttct tgggtcactt gtgcccactt  caacgaaaac caccatgga aacagaattt catgcaaat ccaaaagact ataaatatag  gattatgatt tcatcatgaa tattttgagc acacactta agtttgagc tatttcttga  tggaagtga gggattttat tttcaggctc aacctactga cagccacatt tgacatttat  gccggaattc </p>	<p> VACHRHLSV P  TASIMGLCII  EDETICQINE  QVTLRIHRKN  VMPISFFPD  SSKHALGYTL  SSMPRGSARI  TVSKDQSSCT  ENGEV </p>	Homo sapiens
379	Alpha 1c- adrenoceptor	NP_000671.1	<p> THYIYNLAV ADLLTSTVL PFSAIFEVLG YWAFGRVFCN IWAADVLC TASIMGLCII  SIDRYIGVSY PLRYTIVTQ RRLMALLCV WALSLVISIG PLFGWRQAP EDETICQINE  EPGYVLFSAI GSFYFLAI IVMYCRVYV AKRESRGLKS GLKTDKSDSE QVTLRIHRKN  APAGSGMAS AKTKHFSVR LLKFSREKKA AKTLGIVVGC FVLCWLPFFL VMPISFFPD  FKPSETVFKI VFWLGYLNSC INPIIYPCSS QEFKAFQNV LRIQCLRRKQ SSKHALGYTL  HPPSQAVEGQ HKDMVRIPVG SRETFYRISK TDGVCWKFF SSMRGSARI TVSKDQSSCT  TARVRSKSLF EVCCVGPST PSLDKNHQP TIKVHTISLS ENGEV </p>	<p> VACHRHLSV P  TASIMGLCII  EDETICQINE  QVTLRIHRKN  VMPISFFPD  SSKHALGYTL  SSMPRGSARI  TVSKDQSSCT  ENGEV </p>	Homo sapiens
387	Alpha 2a- adrenoceptor	NM_000681	<p> gcgctcgccg ccacacaggc ggacgcccag gagaacccct gcctccgtcg cggtccctg A  agagctgac gtccacctgc cccggccgc ctgaggacgg ggtgacctc atgcggcccc </p>	<p> gcgctccgtcg  atgcggcccc </p>	Homo sapiens
39	Alpha 2a- adrenoceptor	NM_000681	<p> gcgctccgtcg  atgcggcccc </p>	<p> gcgctccgtcg  atgcggcccc </p>	Homo sapiens

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ctcttcgct ggtacagccc tcaagctct tcagagcaag cactggact caagggcatg

40	387	Alpha 2a- adrenoceptor	AAA51664.1	<p> gctcacaaaa ggttaaatgga tgggggttac ctaggccctgg ctaattcccc ttccattccc  aactctctct ctctttttga agaaaaatgc taaggggcagc cctgcctgcc ctccccatcc  cccgtgtaa atatacacta tttttgatag cacacatggg gccccatat ctcttgccct  tggtttgat gttgaaatcc tggccttggg agagatgcct tccaggcaga cacagctgc  tggttcaggc caagccccct tgcatttctg gctttatgaa gtccctctat  gtcgtcggtt tcaccagcaa ctggtgactg tcccttcgac cggacactgc tttgagattt  cctgacaggg aaaagatttc tgtccatttt tttcctgtgc ctaacagcat aattgccttt  tcctatgtaa atattatgat ggtggatcaa gacataagta aatgagcctt tctgcctcac  atcagccctg tgtataaagc cattattctc tgatgactg tttgccccag taactcactt  taaaacctct ctttccagtg ttccctctct cctccaggg ccactgcttg aagaagaata  tgtatgtttc tatcttttat gtctgtgtgc cctcctgccc ccgaaagtgc tgactatggg  gaaatctttt agctgctggt tttagactcc agggagtggg aattatgtgg aagaagcaaa  cctgatacaa ttggcccaag gtaaacagtt tgaagaagaca aatgggcctg ccaaactgta  cagtttcttc cccaagagct gttaggtatc aaaaatgtgt cctttcccc ctccgtgctt  ttctgggtga gatcatgtca ttgatgaact gccaagtca ggggaggagg gcagagactt  tgtgtttaca tctgcatttc tacatgtttt agacagagac aatttaaggc ctgcactctt  atttcaacta agaaaaacta atgtcagcac atgttgctaa tgacagtggg tttttttta  aataaaaaag tttacagatc aaatgtgaaa taatatgaa tggagtgggtc aaa  MGSIQPDAGN ASWNGTEAPG GGARATPYSL QVTILTVCLA GLMLLTVFG NVLVIIVFT P  SRALKAPQNL FLVSLASADI LVATLVIPFS LANEVWGXY FGKTWCEIYL ALDVLFTSS  IVHLCAISLD RYWSITQAE YNLKRTPRRI KAIITCWVI SAVISFPPLI SIEKKGGGG  PQPAEPRCEI NDKWYVISS CIGSFFAPCL IMILVVRIY QIAKRRTRVP PSRRGPDVA  APPGGTERRP NGLGPERSAG PGAAEAEPLP TQLNGAPGEP APAGPRDTDA LDLEESSSD  HAERPPGPRR PERGPRGKGK ARASQVKPGD SLRGAGRGR GSGRRRLQGRG RSASGLPRRR  AGAGGQNLK RFTFVLAWI GVFWVCWFF FFTYILTAVG CSVPRTLKF FFWFGYCNS  LNPVIYTIEN HFRRAFKKI LCRGDRKRIV </p>	Homo sapiens
41	388	Alpha 2b- adrenoceptor	NM_000682	<p> atggaccacc aggaacccta ctccgtgcag gccacagcgg ccatagcggc ggccatcacc A  ttcctcattc tctttaccat cttcggcaac gctctggtca tccctggctgt gttgaccagc  cgctcgctgc gcgccctca gaacctgttc ctggtgtcgc tggccgcgcg cgacatcctg  gtggccacgc tcatcatccc ttctcgcgtg gccaacgagc tgcgtgggcta ctggtacttc  cgcgccactg ggtcgaggtt gtacctggcg ctgcagctgc tcttctgcac ctctccatc  gtgcacctgt gcgccatcag cctggaccgc tactggggcg tgagccgcgc gctggagtag  aactccaaag gcaccccgcg ccgcatcaag tgcatactcc tcaactgtgtg gctcatcgcc  gccgtcatct cgtgcgcgcc cctcatctac aagggcgacc agggccccc gccgcgcggg  cgccccagtg gcaagctcaa ccaggaggcc tggtaatacc tggcctccag catcgatct  ttctttgctc ctgctctcat catgatcctt gtctacctgc gcatctacct gatcgccaaa  cgagcaacc gcagaggtcc cagggccaaag ggggggcctg gccagggtag gtccaaagcag  ccccgacccg accatggttg ggctttggcc tcagccaaac tgccagccct ggcctctgtg  gcttctgcca gagaggtcaa cggacactcg aagtcactg gggagaagga ggagggggag  acccctgaag atactgggac ccgggcccctg ccaccagtt gggctgcct tcccaactca  ggccagggcc agaaggaggg tgtttgtggg gcatctccag aggatgaagc tgaagaggag </p>	Homo sapiens

gaagaggagg aggaggaggga ggaagagtgt gaacccagg cagtccagt gtctccggcc  
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 gctattttat caataaagga tattttgtaa taag

Homo

P

RSLRAPQNL

ALVILAVLTS

FLILFTIFGN

ATAAIAAAIT

MDHQDPYSVQ

NP\_000673.1

Alpha 2b-

388

42



adrenoceptor	389	Alpha 2c- adrenoceptor	NM_000683			sapiens
VATLIIPFSL ANELLGYWYF RRTWCEVYLA LDVLFCTSSI VHLCAISLDR YMAVSRALRY						sapiens
NSKRTPRRIK CIILTWLIA AVISLPPLIY KGDQGPQPRG RPQCKLNQEA WYILASSIGS						
FFAPCLIMIL VYLRIYLIK RSNRRGPRAK GPGQGQESKQ PRPDHGGALA SAKLPALASV						
ASAREVNGHS KSTGEKEGE TPEDTGTRAL PPSWAALPNS GQGQKEGVCG ASPEDEAEEE						
EEEEEEEC EPQAVPVSPA SACSPPLOQP QCSRVLATLR QVLLGRGVG AIGQWWRRR						
AHVTREKRT FVLAIVIGVF VLCWFPPFFS YSLGAICPKH CKVPHGLFQF FFWIGYCNSS						
LNPIYTIEN QDFRAFRRI LCRPWTQTAW						
ctgcaggcgg ccctggaggg ggcgccctcg ccgagcgcg ccgcccgccg gcgcgcccg A						Homo
actcctccc ggcgcgcgc ggccaggttc gaccaggcgg ccgcgggctc cggttccgg sapiens						
ccagctccc agggcccgcg gcgcgcgc cagcgcgccc gccccgtgc gctaaactga						
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cgcctgcgc cgggctggcg tccgggaccg cggggccgt acggcacgc cgtcgggccc						
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44	Alpha 2c- adrenoceptor	NP_000674.1	<p>gctgtggtca tggcggtggt cgtgctctgc tgggtccctt tcttcttcat ctacagcctg</p> <p>tacggcatct gccgcgaggc ctgccaggtg cccggcccg ctttcaagtt cttctctgg</p> <p>atcggtact gcaacagctc gctcaaccg gtcactaca cggcttcaa ccaggatttc</p> <p>cggccatct tcaagcacat cctctccga cggaggagaa ggggttcag gcagtactc</p> <p>gcaccgtct gggaatcctg gacagtcctg gctcggggc tgggcagaa ggcggcccg</p> <p>gacgcggggg agctttccca gagaccggg gagctttccc agagaccgg gtaggattg</p> <p>gcctccaggg cgcaggggag ggtgcggcag ggcaggagct tggcagagag atagccgggc</p> <p>tccagggagt ggggaggaga gagggggaga ccccttgcc tccccctc agcaaggggc</p> <p>tgcttctggg gctccctgcc tggatccagc tctgggagcc ctgccaggt gtggtgtga</p> <p>ggtcaggtt ttagagagca gtggcagag tagcccccata aatgggcaag caaggagccc</p> <p>ccaaaagaca ctaccactcc ccatccctgt ctgaccaagg gctgacttct ccaggaccta</p> <p>gtcggggggg ggtgcccagg gggcaaggag aaagcaccca caatctttga ttactgaaa</p> <p>tatttaaatg tttgccaaa acaacagcca aaacaaccaa actattttct aaataaacct</p> <p>ttgtaa</p>	Homo sapiens
389			<p>ttgtaa</p> <p>45 MASPALAAL AVAAAAGPNA SGAGRGSG VANASGASWG PPRQYSAGA VAGLAUVGF P</p> <p>LIVTVVGNV LVIAVLTSR ALRAPQNLFL VSLASADILV ATLMPFSLA NELMAYWYFG</p> <p>QVWCGVYIAL DVLFCTSSIV HLCALSLDRY WSVTQAVEYN LKRTPRRKA TIVAVWLISA</p> <p>VISFPPVLVSL YRQPDGAAYP QCGLNDETWY ILSSCIGSEF APCLIMGLVY ARIYRVAKRR</p> <p>TRTLSEKRAP VCPDGASPTT ENGLGAAAGE ARTGTRPRP PTWSRTRAAQ RPRGGAPGPL</p> <p>RRGRRRRAGA EGGAGGADGQ GAGGAAQSG ALTASRSPGP GGRLSRASSR SVEFFLSRRR</p> <p>RARSSVCRK VAQAREKRFT FVLAVVMGV VLWFFPFFFI YSLYGICREA CQVPGPLFKF</p> <p>FFWIGYCNSS INPIYTVFN QDRPSFKHI LFRRRRGRF Q</p>	Homo sapiens
599	Bradykinin B1 Receptor	NM_000710	<p>ctgtgcatgg catcatcctg gccccctcta gagctccaat cctccaaacca gagccagctc A</p> <p>ttccctcaaa atgtctacggc ctgtgacaaat gctccagaaag cctgggacct gctgcacaga</p> <p>gtgctgccga catttatcat ctccatctgt ttcttcggcc tcttagggaa cctttttgtc</p> <p>ctgttggtct tctcctgcc cggcgggcaa ctgaactgg cagaaatcta cctggccaac</p> <p>ctggcagcct ctgatctggt gttgtcttg ggttgccct tctgggcaga gaatatctgg</p> <p>aaccagttta actggccttt cggagccctc ctctgcccgtg tcatcaacgg ggtcatcaag</p> <p>gccaatgtgt tcatcagcat ctctctggtg gtggccatca gccaggaccg ctaccgcgtg</p> <p>ctggtgcacc ctatggccag cggaaaggcag cagcggcgga ggcaggcccc ggtcacctgc</p> <p>gtgctcatct ggggtgtggg gggcctcttg agcatcccca cattcctgct gcgatccatc</p> <p>caagccgtcc cagatctgaa catcacgcc tgcactctgc tctcccccga tgaggcctgg</p> <p>cactttgcaa ggattgtgga gttaaataat ctgggtttcc tctaccact ggctgcgac</p> <p>gtcttctca actaacacat cctggcctcc ctgcgaacgc gggaggaggt cagcaggaca</p> <p>agagtgcggg ggcgaagga tagcaagacc acagcgtga tctcacgct cgtggttgc</p> <p>ttcttggtct gctgggcccc ttaccacttc tttgcccctc tggaattctt attccaggtg</p> <p>caagcagtc gaggtgctt ttgggaggac ttcatigacc tgggcctgca attggccaac</p> <p>ttctttgct tcaataacag ctccctgaat ccagtaattt atgtcttctg gggccggctc</p> <p>ttcaggacca aggtctggga actttataa caatgaccc taaaagtct tgctccaata</p> <p>tcttcattcc ataggaaaga aatcttccaa cttttctggc ggaattaaaa cagcattgaa</p> <p>cc</p>	Homo sapiens

46	599	Bradykinin B1 Receptor	NP_000701.1	600	Bradykinin B2 Receptor	NM_000623	47
			MASSWPPLLEL QSSNQSLFF QNATACDNAP EAWDLLHRVL PTFIISICFF GLLGNLFVLL P				Homo sapiens
			VFLLPRRQLN VAEIYLANLA ASDLVFVLGL PFWAENIWNQ FNPWFGALLC RVINGVIKAN				
			LFISIFLVA ISQDRYRVLV HPMASGRQQR RROARVTCVL IIVVGGLLSI PTFELRSIQIA				
			VPDLNITACI LLLPHEAWHF ARIVELNIG FLPLAAIVF FNYHILASLR TREEVSRTRV				
			RGPDKSKTTA LILTLVAFLL VCWAPYHFFA FLEFLFQVQA VRGCFWEDFI DLGQLQANFF				
			AFTNSSLNPV IYFVVGRLFR TKWELYKQC TPKSLAPISS SHRKEIFQLE WRN				
			atgtttctctc cctggaagat atcaatgttt ctgtctgttc gtgaggactc cgtgcccacc A				Homo sapiens
			acggcctctt tcagcgccga catgctcaat gtcaacttgc aagggccacc tcttaacggg				
			acctttgccc agagcaaatg ccccaaatg gtctggctgg gctggctcaa caccatccag				
			cccccttcc tctgggtgct gttcgtgctg gccacctag agaactctt tgtcctcagc				
			gtcttctgcc tgcacaagag cagctgcacg gtggcagaga tctacctggg gaacctggcc				
			gcagcagacc tgatcctggc ctgcgggctg ccttcttggg ccatcaccat ctccaacaac				
			ttcgactggc tctttgggga gacgctctgc cgcgtgttga atgccattat ctcatgaac				
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			gaagtgttca ccaacatgct cctgaatgtc gtgggttccc tgtgcccc gagtgtcatc				
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			gagatccaga cggagaggag ggcacgggtg ctagtctctgg ttgtgctgct gctattcatc				
			atctgctggc tgcccttcca gtcacgacc ttcttgata cgtgctgctg cctcggcatc				
			ctctccagct gccaggacga gcgcatcatc gatgtaatca cacagatgc ctccttcatg				
			gcttacagca acagctgct caaccactg gtgtactgta tctgtggcaa gcgcttccga				
			aagaagtctt gggaggtgta ccaggggagtg tgccagaaag ggggctgcag gtcagaacct				
			attcagatgg agaactccat gggcacactg cggacctcca tctcgtgga acgcagatt				
			cacaaactgc agactgggc agggagcaga cagttagcaa acgcccagag ggtgctgtg				
			aatttgtgta aggattgag gacagttgct ttacagatg ggcacaggaa tgcacaggag				
			acatctatgc acgaccttg gaaatgagtt gatgtctccg gtaaaaacac ggagactaat				
			tcctgccccg ccaaatattg caggagcat ggcgtgagg atgggtgaa ctcacgcaca				
			gccaaaggact ccaaaatcac aacagcata ctgttcttat ttgctgcc acctgagcca				
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			cctccctgt gtctcctgc cctgccccag caagacaact tagattctca ggagaaactgc				
			catccagctt tggtgcaatg gctgagtga caagtgaatt gttgccctgg gtttctttaa				
			tctattcagc tagaactttg aaggacaatt tcttgccatta ataaaggtta agcctgagg				
			ggtccctgat acaaacctgg agaccaggat tttatggctc cctcactga tggacaagga				
			ggtctgtgcc aaagaagaat ccaataagca catattgagc acttgctgta tatgcagtat				
			tgagcactgt aggcaagacc caagaaagag aaggagccat ctccatcttg aaggaaactca				
			aagactcaag tgggaacgac tgggcactgc caccacaga agctgttctg acgagcgggt				
			cgagcaggggt gctgtgggtg atatggacag cagaaggggg agaccaaggt tccagctcaa				
			ccaataacta ttgcacaacc acctgtccct gcctcagttc ccttttatgt aacatgaagt				
			cgttgtgagg gttaaaggca gtaacaggta taaagtactt agaaaagcaa aggtgtgtac				

48	600	Bradykinin B2 Receptor	NP_000614.1	<p>gtacatgtga ggcatcatta cgcagacgta actgggatat gttactata agaaaaagac  actgaggtct agaaatagct ccgtggagca gaatcagtat tgggagccgg tggcggtgtg  aagcaccagt gtctggcaca cagtaggtgc tcattggctc ccttccacct gtcattccca  ccaccctgag gcccacccg cccacacac aggagcattt ggagagaagg ccatgtcttc  aaagtctgat ttgtgatgag gcagaggaag atatttctaa tcggtcttgc ccagaggatc  acagtctga gacccccac caccagccg tacttggaa gggggagagt gcaggcctgc  tcagggactg ttctgtctc agcaaccaag ggattgttcc tgtcaatcaa tggttatttg  gaagtgccc cagtatgagc cctagaagag tgtgaaaaag aatggcaatg gtgttcacca  tcggcagtcg cagggcagca ctcatctact tgataaatga atattatta gctggttggg  gagctagaac ctggagagct agaacctgga gaactagaac ctggagggtc agaacctgga  gaggctagaa ccaagaaggg ctagaacctg gaggggctag aacctagaga agctaaaacc  tgagctagaa gctggaggac tagaacctgg agggctggaa tctgaagggc tagaacctgg  agggctggaa tctggagagc tagaacctgg agggctagaa cctggagggc tagaacctag  aagggctaga acctggaggg ctggaatctg gagagctaga acctggaggg ctagaacctg  gagggctaga acctagaagg gctagaacct ggagggctag aacctggaa gggtagaac  agaagggcta gaacctggag agccagaacc tggagggcta gaacctggaa gggtagaac  ctgtagagct agaactgga gagctagaac ccggcaggct agaacctggc agctagaac  ctggagggaa tgaacctgga gggctagaac ctggagaatg agaaaaatct acatggcaaa  gagccataa atcttgacca atccaaactct gaattttaa ccaaaagcgt gaaaaaaag  attccctcct taccaccaac ccactctttt tcccaccac ccactctcct ctgcctcagt  aagtatctgg aggaagaaa cagtggaag aagaagtaa aaccttag tattagtatt  agaatgaagt caactgtgc cacacatgtt gaatgaaaa aaaaaaag aggtgtgtt  ttgtcacaca gggcagtcac tcagcaccag agcagtgat ggtctgagac tctcttagga  gcagagctct gccgcaatgg ccagtgggg atccacacct ggtctgagg gcaactgagt  ctgcgggaga agagcgccc tatgcatggt gtagatgcc tgataagaa catctgtcct  gtgaaagact caatgagctg ttatgttga aacaggaagc attcacatc caaacgagaa  aatcatgtaa acatgtgtct ttctgtaga gcataataa tggatgaggt tttgcaaaa  aaaaaaaaa aaa</p>	Homo sapiens
49	635	Beta-1 adrenoceptor	NM_000684	<p>tgctaccgc gcccggtctt ctggggtgtt ccccaaccac ggccacaccc A  cccgccccg gccctccgag ctccgcatgg gcgcgggggt gctcgtcctg ggcgctccg  agcccggtaa cctgtcgtcg gccgcacgc tcccgcagg gcgggccacc gcggcgggc  tgctggtgcc cgcgtcgcc cccgctcgt tgcgtctcc gccagcgaa agccccgagc  cgctgtctca gcagtggaca gcgggcatgg gtctgtgat gtgcgtcatc gtgctgtca  tcgtggcggg caatgtgctg gtgatcgtgg ccatcgccaa gacgcgcgg ctgcagacgc</p>	Homo sapiens

Accession	Gene	Species	Sequence
50	Beta-1 adrenoceptor	Homo sapiens	<p>635 NP_000675.1</p> <p>MGAGVILVGA SEPNLSSAA PLPDGAATAA RLIVPASPPA SLPPASESP EPLSQOWTAG P</p> <p>MGLMALIVL LIVAGNVLVI VAIKTPRLQ TLTNLFMSL ASADLMGLL VVFGATIVV</p> <p>WGRWEYGSFF CELWTSVDVL CVTASIELC VIALDRYLAI TSPFRYQSL TRARAGLVC</p> <p>TVWALSALVS FLFILMHWRR AESDEARRCY NDPKCCDFVT NRAYAIASSV VSFYFLICIM</p> <p>AFVYLRVFRE AQQVKKIDS CERRFLGGPA RPPSPSPSPV PAPAPPSPPP RPAATAATAP</p> <p>LANGRAGKRR PSRLVALREQ KALKTLGIIM GVFTLCWLPE FLANVVKAFH RELVPDRLEFV</p> <p>FENWLGYANS AFNPIIYCRS PDFRKAFAQGL LCCARRAARR RHATHGDRPR ASGCLARPGP</p> <p>PPSPGAASDD DDDDVVGATP PARLLEPWAG CNGGAAADSD SSLDEPCRPG FASESKV</p> <p>actgcgaagc ggctttctca gagcacgggc tggaaactggc aggcaccgcg agcccttagc A</p> <p>accgcacaag ctgagtgtgc aggacgagtc cccaccacac ccacaccaca gccgtgaat</p> <p>gaggtctcca ggcgtccgct cgcggcccg cgcggcccg agagcccgcc tgggggtccg ccgctgaag</p> <p>cgccccagc cagtgcgctt acctggcaga ctgcggccca ctgcggccca cggggaacgc</p> <p>agcgcttct tgcggccacc caatagaagc catgcgccg accacgacgt cagcagcaaa</p> <p>agggacgagg tgtgggtggt gggcatgggc atcgtcatgt ctctcatcgt cctggccatc</p> <p>gtgtttggca atgtgctggt catcacagcc attgccaaat tcgagcgtct cgagacggtc</p> <p>accaactact tcatacttc actggcctgt gctgacttcg tcatggcctt ggcagtgtg</p> <p>cccttgggg ccgccccat tcttatgaaa atgtggactt ttggcaactt ctggtgcgag</p> <p>ttttggactt ccattgatgt gctgtgcgtc acggccagca ttgagacctt gtgcgtgac</p>
51	Beta-2 adrenoceptor	Homo sapiens	<p>640 NM_000024</p> <p>actgcgaagc ggctttctca gagcacgggc tggaaactggc aggcaccgcg agcccttagc A</p> <p>accgcacaag ctgagtgtgc aggacgagtc cccaccacac ccacaccaca gccgtgaat</p> <p>gaggtctcca ggcgtccgct cgcggcccg cgcggcccg agagcccgcc tgggggtccg ccgctgaag</p> <p>cgccccagc cagtgcgctt acctggcaga ctgcggccca ctgcggccca cggggaacgc</p> <p>agcgcttct tgcggccacc caatagaagc catgcgccg accacgacgt cagcagcaaa</p> <p>agggacgagg tgtgggtggt gggcatgggc atcgtcatgt ctctcatcgt cctggccatc</p> <p>gtgtttggca atgtgctggt catcacagcc attgccaaat tcgagcgtct cgagacggtc</p> <p>accaactact tcatacttc actggcctgt gctgacttcg tcatggcctt ggcagtgtg</p> <p>cccttgggg ccgccccat tcttatgaaa atgtggactt ttggcaactt ctggtgcgag</p> <p>ttttggactt ccattgatgt gctgtgcgtc acggccagca ttgagacctt gtgcgtgac</p>

52	Beta-2 adrenoceptor	NP_000015.1	640	gagtggtatc gctactttgc cattacttca cttttcaagt accagagcct gctgaccaag aataaggccc ggtgatcat tctgatgtg tggatttgt caggccttac ctctctttg ccattcaga tgcactgga cgggcccacc caccaggaag ccatcaactg ctatgccaat gagacctgt gtgacttctt cactgaacaa gctatgcca ttgctcttc catcgtgtcc ttctacgtt cctgtgtgat caaatcttg ggtcttcca ggttcttca gtagccaaa aggcagctc agaagattga caaatcttg ggcgcttcc atgtccaga cttagccag gtggagcagg atggcgagac ggggcatgga ctcgcagat cttccaaagt ctgcttgaag gagcacaaag cctcaagac gttaggcac atcatggga cttcacct ctgctggctg cccttctca tcttaacat tgtgatgtg atccaggata acctcatcc taaggagtt tacctctc taaattggt aggtatgtc aattctggt tcaatcccc tatctactgc cggagccag attcaggat tgccttcag gagttctgt gctgcgcag gtctctttg aaggcctatg ggaatggcta ctccagcaac ggcaacacag gggagcagag tggatacac gtggaacagg agaaagaaa taaactgtg tgtgaagacc tcccaggcac ggaagactt gtggccatc aaggtactgt gcttagcgt aacattgatt cacaaggag gaattgtagt acaaatgact cactgctga aagcagttt tctacttta aagaccccc ccccccaac agaacactaa acagactatt taacttgag gtaataaaat tagaataaaa ttgtaaaaat tgtatagaga tatgcagaag gaaggcctc ctctgcctt tttattttt ttaagctgta aaaagagaga aaacttattt gagtattat ttgtatttg tacagttcag ttctctttg catggaattt gtaagtttat gtctaaagag ctttagtct agaggacctg agtctgtat attttcatga cttttccatg tatctacct actattcaag tattagggt aatatatgc tgctggtaat ttgtatctga aggagattt ccttctaca ccttggtat tgaggattt gagtatctg gaccttccag ctgtgaacat ggactcttc cccactctc ttattgtct acacgggta ttttaggcag gatttgagg agcagcttca gttgttttc cgagcaaaag tctaaagttt acagtaata aatgtttga ccatg	Homo sapiens
53	Beta-3 adrenoceptor	NM_000025	643	gctactctc cccaagagc ggtggcacc agggagtgg ggtggggga ggctgagcg A tctggctgg acagctagag aagatggcc aggtgggga agtgcctc atgccttgc gtccctccc ctgagccagg tgatttgga gacccctcc ttctctttt cctaccgcc ccacgcgga cccggggatg gtcctgtgc ctcaagaga cagctctctt gcccctggc cggacctccc caccctggc ccaataacc ccaacaccag tgggctgcca ggggttccgt gggaggggc cctagccggg gccctgctg cgtggcggt gctggccacc gtgggagga acctgctgt catcgtggc atcgctgga ctccagact ccagaccatg accaacgtg tcgtgactt gctggccgca gccgacctg tgatgggact cctgggtgtg ccgcccggg ccacctggc gctgactggc cactggcct tgggcccac tggctgcag ctgtggacct cggtgagcgt gctgtgtgtg accgccaga tcgaaacct gtgcgccctg ccgtggacc	Homo sapiens

gctacctggc	tgtgaccaac	cgctgcggtt	acggcgcaact	ggtcaccaag	cgctgcgccc					
ggacagctgt	ggtcctgggtg	tgggtcgtgt	cgcccgcggt	gtcgttttgcg	cccatcatga					
gccagtgtgtg	gcgcgttaggg	gccgacgcgg	aggcgacgg	ctgccactcc	aaccgcgct					
gctgtgcctt	cgcttccaac	atgccctacg	tgcgtgctgc	ctcctccgtc	tccttctacc					
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gcgcctggg	ggccccctct	ctagtcccg	gccggctttt	ccttgccctg	aactgggctag					
gttatgcaaa	ttctgccttc	aaccgcctca	ttactgcgg	cagccccgac	tttcgcagcg					
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gcaacaactc	tgttgatcag	aacctgtgga	aaacctctgg	cctctgttca	gaatgagtcc					
ctagggattc	cccgctgtgt	acactctacc	ctccagaacc	tgacgactgg	gccatgtgac					
cgaaggagg	atccttacc	agtgggtttt	cacctctc	ttgctctctg	tctgagagat					
gttttctaaa	ccccagcctt	gaacttca	ctccctcag	tggtagtgct	caggtgccgt					
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aagatttggg	gttttatctc	tggttccctt	attactgtct	tcaagcagtg	gcctctctca					
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accttccctg	aaactcttga	aatccagttg	ccattgagta	gcaaagccac	gtccccaca					
ggacttggac	agagggccca	caggggggatg	ggctggctgt	ggccaggttt	agggcagggg					
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ttccccactca	ccttccccag	ctacaaaaat	ctgtattatc	ctcttaagt	aaaaactggag					
ttac										
643	Beta-3 adrenoceptor	NP_000016.1	MAPWPHESS	LAPWFDLPTL	APNTANTSGL	PGVPWEAALA	GALLALAVLA	TVGNNLLIV	P	Homo sapiens
			AIATWPRLOQ	MTNVFVTSIA	AADLVMGLLV	VPPAATLALT	GHWPGLGATG	ELWTSVDVLC		
			VTASIELTICA	LAVDRYLAVT	NPLRYGALVT	KRCARTAAVL	VWVSAAVSF	APIMSQWVRV		
			GADAEAQORCH	SNPRCAFAF	NMPYVLLSSS	VSFYLPLLV	LFVYARFVV	ATRLRLLRG		
			ELGRFPPEES	PPAPRSIAP	APVGTCAPE	GVPCGRRPA	RLPLREHVA	ICTLGLIMGT		
			FTLCWLPPFL	ANVLRAIGGP	SLVPGPAFLA	INWLGYANSA	FNPLIYCRSP	DFRSARFRLL		

55	688	Opsin, blue- sensitive	55	688	Opsin, blue- sensitive
<p> CRGRRRLPPE PCAARPALF PSQVPAARSS PAQPRLCQRL DGASWGVs  ggcatccatg agaaaaatgt cggaggaaga gttttatctg ttcaaaaaa tctcttcagt A  gggcccgtgg gatggccctc agtaccacat tgccctctgtc tggcccttct acctccaggc  agctttcatg ggcactgtct tccttatagg gtcccaactc aatgccatgg tgctgggtggc  cacactgcgc tacaaaaagt tgcggcagcc cttcaactac attctggtca acgtgtcctt  cggaggcttc ctctcttgca tcttctctgt cttccctgtc ttctgtcgca cgtgtaacgg  atacttcgtc ttccggtcgcc atgtttgtgc tttgaggggc ttccctggga cgttagcagg  tctggttaca ggatggtcac tggcccttctc ggcctttgag cgtacattg tcatctgtaa  gcccttcggc aacttcgctc tcagctccaa gcatgactg acggtggtcc tggctacctg  gacattggt attggctct ccatccacc cttcttggc tggagccggt tcatccctga  gggcccgtcag tgttctctgt ggcctgactg gtacacggtg ggcaccaa t accgcagcga  gtcctatacg tggttcctct tcatcttctg cttcattgtg cctctctccc tcatctgctt  ctcctacact cagctgctga gggccctgaa agctgttgca gctcagcagc aggagtcagc  tacgacccag aaggtgaac gggaggtgag cgcgatggtg gttgtgatgg taggacctt  ctgtgtctgc tacgtgccct acgcgccctt cgcctatgtac atggtcaaca accgtaacca  tgggctggac ttacggcttg taccattcc ttcattcttc tccaagagtg cttgcatcta  caatcccatc atctactgct tcatgaataa gcagttccaa gcttgcatca tgaagatggt  gtgtgggaag gccatgacag atgaatccga cacatgcagc tcccagaaaa cagaagtctt  tactgtctcg tctaccgaag ttggccccc aatattggcc tgtttgcaac  agctagaatt aaatttact t </p>					
56	688	Opsin, blue- sensitive	56	688	Opsin, blue- sensitive
<p> MRMSEEFY LFRNISSVGP WDGPQYHIAP VMAFIQAAE MGTVFLIGFP LNAMLVATL P  RYKLRQPLN YILNVSFEG FLICIFSVFP VFVASCNGYF VGRHVCALE GFLGTVAGLV  TGWSLAFLAF ERYIVICKPF GNFRSSKHA LTVVLATWTI GIGVISIPFF GWSRFIPEGL  QCSCGPDWYT VGTKYRSESY TWFLIFCFI VPLSLICFSY TQLLRALKAV AAQQQESATT  QKAEREVSRM VVMVGSFCV CYVPAAFAM YMVNNRNHGL DLRLVTIPSF FSKSACIYNP  IIYCFMKNQF QACIMRMVCG KAMTDESDTC SSQKTEVSTV SSTQVGPV  gagtatctgg atgtcttggga ttttctccc attctgttct gttctgttct cctaatacca A  tctcgttact agacgtaggc attggacgtg acaatcaact gcatttgaac tgagaagaag  aaatattaaa gacacagtct tcagaagaaa tggctcaaa ggcagctcac tcacctaatc  agactttaat ttcaatcaca aatgacacag aatcatcaag ctctgtggtt tctaaccgata  acacaaataa aggatggagc ggggacaa ctccaggaa agaagcattg tgtgccatct  atattactta tgcgtgac atttcagtg gcatccttg aaatgctatt ctcatcaaa  tctttttcaa gaccaatcc atgcaaacag ttccaaatat ttctatcacc agcctggctt  ttggagatct tttactctg ctaacttgtg tgcagtgga tgcacactcac taccttgcag  aaggatggct gttcgggaaga attggttga aggtgctctc ttctatccgg ctacattctg  ttggtgtgct agtgttcaca ttaacaattc tcagcgtgca cagatacaag gcagttgtga  agccacttga gcgacagccc tccaatgcca tctggaagac ttgtgtaaaa gctggctgctg  tctggatcgt gtctatgata ttgtctctac ctgaggtctat attttcaaat gtatacactt  ttcgagatcc caataaaaa atgacatttg aatcatgtac ctcttacct gtctctaaga  agctcttgca agaaatacat tctctgctgt gcttcttagt ttctacatt attccactt  ctattatctc tgtctactat tcttggattg ctaggacctt ttacaaaagc accctgaaca </p>					
57	692	Bombesin Receptor Subtype-3	57	692	Bombesin Receptor Subtype-3



58	692	Bombesin Receptor Subtype-3	NP_001718.1	MAQRQPHSPN QTLISITNDT ESSSVVSND NTNKGWSDN SPGIEALCAI YITYAVIISV P GILGNAILIK VFFKTKSMQT VPNIFFITSLA FGDLLLLLTC VPVDATHYLA EGNLFGRI GC KVL SFIRLTS VGVSVFTLTI LSADRYKAVV KPLERQPSNA ILKTCVKAGC VWIVSMIFAL PEAIFSNVYT FRDPNKNMTF ESCTSYPSVK KLLQEIHSLL CFLVFIYIPL SIISVYISLI ARTLYKSTLN IPTEEQSHAR KQIESRKRIA RTVLIVIVLAF ALCWLPNHL L YLHSHFTSQ T YVDPSAMHFI FTIFSRVLAF SNSCVNPFAL YWLSKSFQKH FKAQLFCCKA ERPEPPVADT SLTTLAVMGT VPGTGSIQMS EISVTSFTGC SVKQAEIDRF	Homo sapiens
59	729	CXC Chemokine Receptor 5	NM_001716	gctgccacct ctctagaggc acctggcggg gaggctctca acataagaca gtgaccagtc A tggtgactca cagccggcac agccatgaac taccgcgttaa cgctggaat ggacctcgag aacctggagg acctgtcttg gaaactggac agattggaca actataacga cactccctg gtggaaaac atctctgccc tgccacagag gggcccctca tggcctcct caaggccgtg ttcgtgcccc tggcctacac cctcatcttc ctctgggcg tgatcggcaa cgtccctggg ctggtgaccc tggagcggca cgggacagaca cgagattcca cgagacctt cctgttccac ctggccgtgg ccgacctcct gctggtcttc atctggcct ttgccgtggc cgagggtct gtgggctggg tccctgggac ctctctctgc aaaaactgtga ttgccctgca aaaagtcaac ttctactgca gcagcctgct cctggcctgc atcgccgtgg accgtacct ggccattgtc cacgccctcc atgcctaccg ccaccgccgc ctctctcca tccacatcac ctgtgggacc atctggctgg tgggcttct ccttgccctg ccagagattc tcttcgcaa agtcagccaa ggccatcaca acaactccct gccacgttg gccctctcc aagagaacca agcagaacg catgcctggt tcaactcccg attcctctac catgtggcgg gattcctgct gccatgctg gtgatgggt ggtgctacgt gggggtagtgc cacagggtgc gccaggccca gggcgccct cagcggcaga aggcagtcag ggtggccatc ctggtgacaa gcattctctt cctctgctg tcacctacc acatgctcat ctccctggac acctggcga ggctgaagg cgtggacaat acctgcaagc tgaatggctc tctccccgtg gccatcaca tgtgtgagt cctgggctg gccactgct gcctcaacc catgctctac acttgcctc gcgtgaagt ccgcagtgc ctgtcgggc tccctgacga gctgggctgt accggccctg cctccctgtg ccagctctc cctagctggc gcaggagcag tctctctgag tcagagaatg ccacctctc caccacgttc taggtcccaag tgtccctttt tattgctgct tttcttggg gcaggcagt atgctggatg ctccttccaa caggagctgg gatcctaagg gctcaccgtg gctaagagt tccctaggat atcctcattt ggggtagcta gaggaacca ccccatctc tagaacatcc ctgccagctc ttctgccggc cctggggcta ggctggagcc caggagcgg aaagcagctc aaaggcacag tgaaggctgt ccttaccat ctgcaccccc ctgggctgag agaacctcac gcacctccca	Homo sapiens

60	729	CXC Chemokine Receptor 5	NP_001707.1	<p> MNYPLTLEMD  IFLLGVIGNV  LCKTVIALHK  ALPEILFAKV  VWHLRQAO  PVAITMCEFL  SESENATSLT  ggcacgagcc  ggatggaaac  atgcaactcc  tgtaactcct  tgcaatacaa  acctgctctt  tttttgggta  agatcctttt  ttgccttgcg  tggccatctt  accacacctg </p>	<p> LENLEDLFEW  LVIVILERHR  VNFYCSLL  SQGHNNSLP  RPQRQKAVRV  GLAHCCCLNPM  TF </p>	<p> LDRLDNYNDT  QTRSSTETFL  ACIAVDRYLA  RCTFSQENQA  AILVTSIFFL  LYTFAGVKFR </p>	<p> SILVENHLCPA  PHLAVADLLL  IVHAVHAYRH  ETHAWFTSRF  CWSPHYVIVF  SDLRLTLTKL </p>	<p> TEGPLMASFK  VFIPLFAVAE  RRLLSIHITC  LYHVAGFLLP  LDTLARLKAV  GCTGPASLCQ </p>	<p> AVFVPVAYS  GSVGVILGTF  GTIMLVGFL  MLVMGWCVVG  DNTCKLNGSL  LFPSWRRSSL </p>	Homo sapiens
61	735	C-C Chemokine Receptor 1	NM_001295	<p> ggcacgagcc  ggatggaaac  atgcaactcc  tgtaactcct  tgcaatacaa  acctgctctt  tttttgggta  agatcctttt  ttgccttgcg  tggccatctt  accacacctg </p>	<p> cagaaacaaa  tccaaacacc  gtgccagaag  gtattttgtc  gagggtaaaa  cctgtttcacg  tgccatgtgt  catcatcctg  ggcaaggacc  ggcttccatg  cagccttcac </p>	<p> gacttcacgg  acagaggact  gtgaacgaga  attggcctgg  aacatgacca  cttcccttct  aagatcctct  ctgacgattg  gtcacttttg  ccaggcttat  tttctctcacg </p>	<p> acaaagtccc  atgacacgac  gggcccttgg  ttggaaacat  gcattacact  ggatcgacta  ctgggtttta  acaggtaact  gtgtcatcac  acttttccaa  aaagcctacg </p>	<p> ttggaaccag  cacagagttt  ggcccaactg  cctgggtggtc  cctgaacctg  caagttgaag  ttacacagcg  ggccatcgtc  cagcctcgtg  cagcatcatc  gacccaatgg  agagtggag </p>	<p> agagaagccg  gactatgggg  ctgccccctc  ctggtctctg  gccatttctg  gatgactggg  ttgtacagcg  cacgcccgtg  atgtgggccc  gaattcactc  ctgttttcagg </p>	Homo sapiens

62	735	C-C Chemokine Receptor 1	NP_001286.1	<p>ctctgaaact gaacctcttt gggctggtat tgccttttgtt ggtcatgac atctgtaca  caggattat aaagattctg ctaagacgac caaatgagaa gaaatccaaa gctgtccgtt  tgatttttgt catcatgac atcttttttc tcttttgag cccctacaat ttgactatac  ttatttctgt ttccaagac ttctgtttca cccatgagtg tgagcagagc agacatttgg  acctggctgt gcaagtgcg gagtgatcg ccatcacgca ctgctgtgtc aaccagtga  tctacgcctt cgttggtgag aggttcgga agtacctcg cagttgtttc cacaggcgtg  tgctgtgca cctggttaaa tggctcccc tctctccgt gacaggctg gagagggtca  gctccacatc tccctccaca ggggagcatg aactctctg tgggttctga ctcagaccat  aggaggccaa cccaaaataa gcaggcgtga cctgccaggc acactgagcc agcagcctgg  ctctccagc caggttctga ctctggcac agcatggagt cacagccact tgggatagag  agggaatga atggtggcct ggggcttctg aggttcttgg ggtctcagtc tttccatga  actctcccc tggtagaaag agatgaatg agcaaacca aatattccag agactgggac  taagtgtacc agagaagggc ttggactcaa gcaagatttc agatttgtga ccattagcat  ttgtcaacaa agtcacccac ttccccatat tgcctgcaca aaccaattaa acccagtagt  ggtgactgtg ggctccattc aaagtgagct cctaagccat gggagacact gatgtatgag  gaatttctgt tcttccatca cctcccccc cccgccacc tccactgcc aagaacttgg  aaatagtgat ttccacagtg actccactt ggtccacga gccaatcagt agccagcatc  tgcctcccc tcaactccac cgcaggattt ggtctcttgg aatcctgggg aacatagaac  tcatgacgga agagttaga cctaagcaga aatagaaatg gggaaactac tctgtgcagt  ggaactaaga agcccttag gaagaatttt tatatccact aaatcaaac aattcaggga  gtgggctaag caggggccat atgaataaca tgggtgtgctt cttaaaatag ccataaaggg  gagggaactca tcatctccat ttacccttct tttctgacta ttttcagaa tctctctct  tttcaagtgt ggtgatagt ttcccttct taatggcttt attgcagcga ttaataacag  gcaaaaggaa gcagggttgg ttcccttct tttgttctt catctaaagg tctgtgttt  atgggtcaga gttccgactg ccatcttga cttgtcagca aaaaaaaa aaaaaa  METPNTTETY DTTTEFDYGD ATPCQKNER AFGAQLPPL YSLVFVIGLV GNILVVLV P  QYKRLKNMTS IYLLNLAISD LLFLTLPFW IDYKLDWMV FGDAMCKILS GFYTGLYSE  IFFIILLTID RYLAIVHAVF ALRARTVTFG VTTSIIWAL AILASMPGLY FSKTQWETH  HTCSLHPHE SLREWKLFQA LKLNLFGLVL PLLVMICYT GIILKILRRP NEKSKAVRL  IFVIMIIFFL FWTPYNLTIL ISVFQDFLFT HECEQSRHLD LAVQTEVIA YTHCCVNPVI  YAFVGERFRK YLRQLFHRV AVHLVKWLFP LSVDRLERSV STSPSTGEHE LSAGE</p>	Homo sapiens
63	737	C-C Chemokine Receptor 3	NM_001837	<p>tttttcttct tctatcacag ggagaagtga aatgacaacc tcactagata cagttagagac A  ctttggtacc acatctact atgatgacgt gggcctgctc tgtgaaaaag ctgataccag  agcactgat gccagtttg tgcccccgct gtactccctg gtgttcaactg tgggctctt  gggcaatgtg gtggtggtga tgatcctcat aaaaacagg aggtcccgaa ttatgaccaa  catctacctg ctcaacctgg ccatttcgga cctgctcttc ctgctcacc ttccattctg  gatccactat gtcagggggc ataactgggt ttttggccat ggcattgtga agctcctctc  agggttttat cacacaggct tgtacagcga gatcttttc ataactctgc tgacaatcga  caggtacctg gccattgtcc atgctgtgtt tgcccttcca gcccggactg tcacttttgg  tgtcatcacc agcatcgtca cctggggcct ggcagtgcta gcagctcttc ctgaatttat  cttctatgag actgaagagt tgtttgaaga gactctttgc agtgcctctt acccagagga</p>	Homo sapiens

64	737	C-C Chemokine Receptor 3	NP_001828.1	MTTSLDVTVE KYRRLRIMTN IFFIILLTID TLCALYPED IFVIMAVFFI YAFVGERFRK cgggggtttt tctctcattt agaaaagcaa aaatgaaccc atctgtatga tcttctgccc tggttctggt accttgccat cagaccagtg gcttttacag tgcacgcggt ctacatggtc ctgagcgcaa ttctcagctc tttgctactc cggtagaat tagtgctctt gatacttgga atccccatcat aaacctgcag ctgacacccc tgtaggaaaa ctttaaataa accacacagt	FGTTSYYDDV IYLLNLAISD RYLAIVHAVF TVYSWRHFHT FWTPYNVAIL YLRHFFRHL cctctctctt gctgcttctg cacgggatata aagtatcccc ccactgtat cctgtttcaa ctcgatctg ggtttttggg tggtcatattc gttttctctg agtgacacac cctgaaatc catgactatc gatctttgcc cctagagacc ctatgccatc ctactttttt gggctttttt cagctcatct atgaaatggt ggatatttta gaaagacagc	atgccacac tctgctacac ccatccggct tggtatctct agcatctgga accggtgat acaggcactt aagaacccag tcagatgcag cttccacact	tctgagaatg aggaatcatc cattttgtc tctctcttcc ctggtgacag ctagcctttt gctgcacatg ctctgtctct aaaattgcct cactctctct	GNVVVMILLI GFYHTGLYSE FYETEELFEE SKKKYKAIRL YSHCCMNPVI LSIVE	Homo sapiens
65	738	C-C Chemokine Receptor 4	NM_005508	ggttttctgt accttgccat cagaccagtg gcttttacag tgcacgcggt ctacatggtc ctgagcgcaa ttctcagctc tttgctactc cggtagaat tagtgctctt gatacttgga atccccatcat aaacctgcag ctgacacccc tgtaggaaaa ctttaaataa accacacagt	ggttttctgt accttgccat cagaccagtg gcttttacag tgcacgcggt ctacatggtc ctgagcgcaa ttctcagctc tttgctactc cggtagaat tagtgctctt gatacttgga atccccatcat aaacctgcag ctgacacccc tgtaggaaaa ctttaaataa accacacagt	gctgagaatg aggaatcatc cattttgtc tctctcttcc ctggtgacag ctagcctttt gctgcacatg ctctgtctct aaaattgcct cactctctct	accatcttct aaaacgctgc atcatggcg tatcaatcca ctggtgacag gttgagagag ctgggcagat ccatccacag aaagaggag acagtccttc	GNVVVMILLI GFYHTGLYSE FYETEELFEE SKKKYKAIRL YSHCCMNPVI LSIVE	Homo sapiens

66	738	C-C	Chemokine Receptor 4	NP_005499.1	gtccagcctg gcaagggttc acctgggctg aggcacacctt cctcacacca ggttgccctg caggcatgag tcaagtctgat gagaactctg agcagtgctt gaataagatt gtagtaata ttgcaaggca aagactattc ccttctaacc tgaactgatg ggtttctcca gaggaattg cagagtactg cgtgatggag taaatcgcta kcttttctg tggcaaatgg gccccg VLVLFKYKRL RSMTDVYLIN LAISDLLFV SLFWGYAA DQWVFLGLC KFLSWYLVG FYSGIFFVML RMDRYLAIV HAVFSLRAT LTYGVITSLA TWSVAFFASL PMFLSTCYT ERNHTYCKTK YSLNSTWKV LSSLEINILG LVPLGIMLF CYSMIIRTIQ HCKNEKNKA VKMIFAVVVL FLGFWTPYNI VLFLLETLVEL EVLQDCTFER YLDYAIQATE TLAFFVHCLN PIIYFLGK FRKYILQLFK TCRGLFVLCQ YCGLLIQIYSA DTPSSSYTQS TMDHLHDAL gtgagacagg ggtagtgcga ggcggggcac agccttccctg tgtgggttta cgcgccagag A agcgtcatgg acctggggaa accaatgaaa agcgtgctgg tgggtgctct ccttgcatt ttccaggatg gcctgtgtca agatgaggtc acggacgatt acatcgaga caacaccaca gtggactaca ctttgttgcga gtctttgtgc tccaagaagg acgtgcggaa ctttaaagcc tggttccctc ctatcatgta tcccatcatt tgtttcgtgg gcctactggg caatgggctg gtcgtgtga cctatatcta ttcaagagg ctcaagacca tgaccgatac ctacctgctc aacctggcgg tggcagacat ccttctctc ctgaaccttc cttctgggc ctacagcgg gccaaagtcc ggttcttcgg tgtccacttt tgaagctca tctttgccc ctacaagatg agcttcttca gtggcatgct cctacttctt tgaccgcta ttgaccgcta cgtggccatc gtccaggctg tctcagctca cgcgcccggt gcccggttcc ttctcatcag caagctgtcc tgtgtgggca tctggatact agccacagt cctccatcc cagagctcct gtacagtgc ctccagagga gcagcagtga gcaagcgtg cgtgctctc tcatcacaga gcatgtggag gcctttatca ccatccaggt ggcacagatg gtgctggct tcttggtccc cctgctggcc atgagcttct gttaccttgt catcatccgc acctgtctcc aggcacgcaa ctttgagcgc aacaaggcca tcaaggtgat catcgtgtg gccacttca acatcacca tagcacctgt tacaatgggg tggctcctgg ccagacgggt ccagcctac gacgtcact acagcctggc ctgctccgc gagctcagta agcaactcaa catcgccttc gtacgccttc atcgcgctca agtccgcaa cgtctctc tgctgcgtca acccttctt gtacgccttc cgtgctcagc tccggcagtg gtcttctgt aagctcttca agaacctggg ctgctcagc caggcagcaga ccaccaccac cttctccca cggcacatcc ggcgtctctc catgagtgtg gagccgaga ggtccctggg gtggggatag taggcgactc tctgctctgg actagagga cctctccca cgcgcaaaag ctgctcaggg aaaagcagct ggagcagatg caatgactca ggacatcccc cgcgcaaaag ggtccctggg gtggggatag ctccctcag agtgcaggcc ctgctccaga agttagcttc acccaatcc cagctacctc aaccatgcc gaaaagaca ggcgtgataa gctaacacca gacagacaa actgggaaac agaggctatt gtccctaaa ccaaaaactg aaagtgaag tccagaaact gttccacct gctggagtga aggggccaag gaggtgagt gcaaggggag gggagtggtc ctgaagagtc ctctgaatga accttctggc ctccacaga ctcaaatgct cagaccagct cttccgaaaa ccaggccta tctccaagac cagagatagt ggggagactt cttggcttgg tgaggaaaag cggacatcag ctggtcaaac aaactctctg aacctctcc tccatcgtt tcttactgt cctccaaagg agcgggaatg gcagctgcca cgcgcccc taagcacact catccctca cttgcgcgct cgcctccca ggctctcaac agggagagat ggtgtgttcc ctgcaggcca	Homo sapiens
67	741	C-C	Chemokine Receptor 7	NM_001838	gtgagacagg ggtagtgcga ggcggggcac agccttccctg tgtgggttta cgcgccagag A agcgtcatgg acctggggaa accaatgaaa agcgtgctgg tgggtgctct ccttgcatt ttccaggatg gcctgtgtca agatgaggtc acggacgatt acatcgaga caacaccaca gtggactaca ctttgttgcga gtctttgtgc tccaagaagg acgtgcggaa ctttaaagcc tggttccctc ctatcatgta tcccatcatt tgtttcgtgg gcctactggg caatgggctg gtcgtgtga cctatatcta ttcaagagg ctcaagacca tgaccgatac ctacctgctc aacctggcgg tggcagacat ccttctctc ctgaaccttc cttctgggc ctacagcgg gccaaagtcc ggttcttcgg tgtccacttt tgaagctca tctttgccc ctacaagatg agcttcttca gtggcatgct cctacttctt tgaccgcta ttgaccgcta cgtggccatc gtccaggctg tctcagctca cgcgcccggt gcccggttcc ttctcatcag caagctgtcc tgtgtgggca tctggatact agccacagt cctccatcc cagagctcct gtacagtgc ctccagagga gcagcagtga gcaagcgtg cgtgctctc tcatcacaga gcatgtggag gcctttatca ccatccaggt ggcacagatg gtgctggct tcttggtccc cctgctggcc atgagcttct gttaccttgt catcatccgc acctgtctcc aggcacgcaa ctttgagcgc aacaaggcca tcaaggtgat catcgtgtg gccacttca acatcacca tagcacctgt tacaatgggg tggctcctgg ccagacgggt ccagcctac gacgtcact acagcctggc ctgctccgc gagctcagta agcaactcaa catcgccttc gtacgccttc atcgcgctca agtccgcaa cgtctctc tgctgcgtca acccttctt gtacgccttc cgtgctcagc tccggcagtg gtcttctgt aagctcttca agaacctggg ctgctcagc caggcagcaga ccaccaccac cttctccca cggcacatcc ggcgtctctc catgagtgtg gagccgaga ggtccctggg gtggggatag taggcgactc tctgctctgg actagagga cctctccca cgcgcaaaag ctgctcaggg aaaagcagct ggagcagatg caatgactca ggacatcccc cgcgcaaaag ggtccctggg gtggggatag ctccctcag agtgcaggcc ctgctccaga agttagcttc acccaatcc cagctacctc aaccatgcc gaaaagaca ggcgtgataa gctaacacca gacagacaa actgggaaac agaggctatt gtccctaaa ccaaaaactg aaagtgaag tccagaaact gttccacct gctggagtga aggggccaag gaggtgagt gcaaggggag gggagtggtc ctgaagagtc ctctgaatga accttctggc ctccacaga ctcaaatgct cagaccagct cttccgaaaa ccaggccta tctccaagac cagagatagt ggggagactt cttggcttgg tgaggaaaag cggacatcag ctggtcaaac aaactctctg aacctctcc tccatcgtt tcttactgt cctccaaagg agcgggaatg gcagctgcca cgcgcccc taagcacact catccctca cttgcgcgct cgcctccca ggctctcaac agggagagat ggtgtgttcc ctgcaggcca	Homo sapiens

68	741	C-C Chemokine Receptor 7	NP_001829.1	<p>ggccagctgc ctccgcgtga tcaagccac actctgggct ccagagtgg gatgacatgc  actcagctct tggctccact gggatggag gagagacaa gggaaatgtc agggcgggg  agggtgacag tggcgcccca aggccacgag cttgttcttt gttctttgtc acagggactg  aaaacctctc ctcatgttct gcttctgatt cgttaagaga gcaacatttt acccacacac  agataaagt ttcccttgag gaaacaacag ctttaaaag</p> <p>MDLGPMSV LVVALLVIFQ VALLQDEVD DYIGNTTVD YTLFESLSK KDVRNFKAWF P  LPIMYSIICF VGLLNGLVV LTYIYFKRLK TMTDYLINL AVADILFLT LPFWAYSAAK  SWVFGVHFCK LIFAIYKMSF FSGMLLLCI SIDRYVAIVQ AVSAHRHRAR VLLISKLSKV  GIWILATVLS IPELLYDLQ RSSEQMRC SLITEHVEAF ITIQVAQWVI GFLVPELLAMS  FCYLVIIRTL LQARNFERNK AIKVIIVVV VFIVFQLPYN GVLQAQTVAN FNITSSTCEL  SKQLNIAYDV TYSLACVRCC VNPFLYAFIG VKFRNDLFKL FKDLGCLSQE QLQWSSCRH  IRSSMSVEA ETTTFSP</p>	Homo sapiens
69	742	C-C Chemokine Receptor 8	AI733823	<p>TTTAAATTTA AAAACTTTAT TGAATAGCA TGTTAGCAGC AGTGAACAGG GCATGSCACA A  GAAGGTTTCC AAAACAAGTT TAGCATGAAG GATGCCATAT GCTGTTGCCA ACAACTAGAA  CACGGTGACT AAAGACACAG TTCTGAATGT CCAGCACAAAC CTCTGGCCTG CAACTATGTT  CAGTGATGAT GATAAACAAAG GTGGTGACTT GGAAGGAATC CCTATGTCAA GTGAGAAAAA  AAATGATGT CTGACCTCCT TATATATGTA AAAAATATAC CTTCAGAGTC CGTCAGTAAG  CTGGAAGAAG TGGATGTTGA AGTTTTTAAC ATCGATGATG GGTCTCCAGT TGTTTCATCAA  CCCATTGGTGA AATAGCTGAA CGGTTCTGAA TCAAAGGTGA TCCTAATAGT GAAGACATTA  ACATTGCAGA AAAAGTGCCT ACAGATTATA TGCTGAAAAT ACGTGATGGG CTTCTTGAAG  GACTAGAGCA GTGTGATTTC AAAACAGAAC AAGAATCAC GTCAGTTTAT</p> <p>TGCCAAATAT GCTGTTGCCA ACACCTAGAA CACAATGACT GGAGACACAG TTGTGCGTGC A  CTGGCACAAAC CTCCAGCCTG TGCTATGTT CAGTGATGAT GATGAGCAAG GTGTGACTT  TGAAGGATTT TGTATATCAA GTGAAAAGAA ATGATATCTG ACCTCCTTAC ATATCTAAAA  CATATACCTT CAAAATCCAT CAATAAGCTG AAAGAAATAG ATATCAAAGA ATATTTTAAAC  ATCATTAATG AGGCTCCAGT TATTCAATCA TTGACCAATG GTAATATAGC TGAATGATT  CTGAATCAAG CTGATTATGA TAATAGTGAT GATGAAGATG ATGTTAATAC TGCAGAAAAA  GTGCCTATAA ATGACACAGT GAAAA</p> <p>ctccagagag gctgctgctc attgagctgc actcacatga ggatacacag tttgtgaaga A  aggaattggc aacactgaaa cctccagaac aaaggctgtc actaagggtcc cgctgccttg  atggattata cacttgacct cagtgtagca acagtgaacc actactata cctgatatac  ttctcaagcc cctgtgatgc ggaacttatt cagacaaatg gcaagttgct cctgtgctgc  ttttattgcc tctgtttgt attcagctct cttggaaaca gctgggtcat cctgggtcctt  gtggtctgca agaagctgag gagcatcaca gatgtatacc tcttgaacct ggcctgtct  gacctgcttt ttgtcttctc ctccccctt cagacctact atctgtgga ccagtgggtg  tttgggactg taatgtgcaa agtgggtgct ggcctttatt acattggctt ctacagcagc  atgtttttca tcacctcat gagtgtggac aggtacctgg ctgtgtcca tgccgtgtat  gccctaaagg tgaggacgat caggatgggc acaagctgtt gcctggcagt atggctaacc  gccattatgg ctaccatccc attgctagt tttaccaag tggcctctga agatgggtgtt  ctacagtgtt attcatttta caatcaacag acttgaagt ggaagatctt caccacttc  aaaatgaaca ttttaggctt ttgatccca ttaccatct ttatgttctg ctacattaaa</p>	Homo sapiens
70	742	C-C Chemokine Receptor 8	LG6770	<p>ggccagctgc ctccgcgtga tcaagccac actctgggct ccagagtgg gatgacatgc  actcagctct tggctccact gggatggag gagagacaa gggaaatgtc agggcgggg  agggtgacag tggcgcccca aggccacgag cttgttcttt gttctttgtc acagggactg  aaaacctctc ctcatgttct gcttctgatt cgttaagaga gcaacatttt acccacacac  agataaagt ttcccttgag gaaacaacag ctttaaaag</p> <p>MDLGPMSV LVVALLVIFQ VALLQDEVD DYIGNTTVD YTLFESLSK KDVRNFKAWF P  LPIMYSIICF VGLLNGLVV LTYIYFKRLK TMTDYLINL AVADILFLT LPFWAYSAAK  SWVFGVHFCK LIFAIYKMSF FSGMLLLCI SIDRYVAIVQ AVSAHRHRAR VLLISKLSKV  GIWILATVLS IPELLYDLQ RSSEQMRC SLITEHVEAF ITIQVAQWVI GFLVPELLAMS  FCYLVIIRTL LQARNFERNK AIKVIIVVV VFIVFQLPYN GVLQAQTVAN FNITSSTCEL  SKQLNIAYDV TYSLACVRCC VNPFLYAFIG VKFRNDLFKL FKDLGCLSQE QLQWSSCRH  IRSSMSVEA ETTTFSP</p>	Homo sapiens
71	742	C-C Chemokine Receptor 8	NM_005201	<p>ggccagctgc ctccgcgtga tcaagccac actctgggct ccagagtgg gatgacatgc  actcagctct tggctccact gggatggag gagagacaa gggaaatgtc agggcgggg  agggtgacag tggcgcccca aggccacgag cttgttcttt gttctttgtc acagggactg  aaaacctctc ctcatgttct gcttctgatt cgttaagaga gcaacatttt acccacacac  agataaagt ttcccttgag gaaacaacag ctttaaaag</p> <p>MDLGPMSV LVVALLVIFQ VALLQDEVD DYIGNTTVD YTLFESLSK KDVRNFKAWF P  LPIMYSIICF VGLLNGLVV LTYIYFKRLK TMTDYLINL AVADILFLT LPFWAYSAAK  SWVFGVHFCK LIFAIYKMSF FSGMLLLCI SIDRYVAIVQ AVSAHRHRAR VLLISKLSKV  GIWILATVLS IPELLYDLQ RSSEQMRC SLITEHVEAF ITIQVAQWVI GFLVPELLAMS  FCYLVIIRTL LQARNFERNK AIKVIIVVV VFIVFQLPYN GVLQAQTVAN FNITSSTCEL  SKQLNIAYDV TYSLACVRCC VNPFLYAFIG VKFRNDLFKL FKDLGCLSQE QLQWSSCRH  IRSSMSVEA ETTTFSP</p>	Homo sapiens

72	C-C	NP_005192.1	atctgcacc agctgaagag gtgtcaaaac cacaacaaga ccaaggccat caggttggtg ctcattgtgg tcattgcatc ttacttttc tgggtcccat tcaacgtggt tctttctctc acttccctgc acagtatgca catcttgat ggatgtagca taagccaaca gctgacttat gccaccatg tcacagaaat catttcttt actcactgct gtgtgaaccc tgttatctat gcttttgtg gggagaagt caagaaacac ccttcagaaa tattcagaa agttgcagc caaatcttca actacctagg agacaaaatg cttaggaga gttgtgaaaa gtcataccc tgccagcagc actcctccc ttctccagc gtagactaca ttttgtgagg atcaatgaag actaaatata aaaaacattt tcttgaatgg catgctagta gcagtggca aggttggtg tgtgaaagg ttccaaaaa agttcagcat gaagatgcc atatatgtg ttgccaacac ttaaaacaca atgactggag acatagttg gcatgcctgg cacaacatca agcctgtgat tgtgtttatt gatgatgtg acaagtggt aactttaaag gattctgtat gccaaagtga aaaaaaagat gctgacctc cttcatatgc aaaaatatac cttcagagac tgtcagtagg ctggaagaag tggatatgga agttttgaca tcaatgatga ggtccagtt gtctatgat tgactgatgg tgaatggct ggagtgttc tgaatcaagg tgattgtgat tatagtaca atgaagatga tgctattaat actgcataaa agtgcctgt agatgacatg gtgaaaatat ttgacaggct tatggaagga ctacagcagc agacttctag acaaatatac gaaattatct cagcttataa aatcaaacag agacttctag acaaaaccca ttgttgatga ggcagatgcc tctagaagag acgtttaaaa gccatcaaac acaatgcctc atcttccctg gaggacccac ttcctgatcc ctcaactgtg tctgatgttt cttctcatgt aagaaataaa aaataaaaat aaaaaaatat atattggtat gtaactacag gaaaaaata aaaaatatat agtggacagt aacctttcaa tcaaaactca gtatcataag tagagactga aaactggcg ttattgattg ttgttattaa cagctgatac aggtattctg ctgatgctac tgctgcctag ttaccatgaa cacgtttttt cactattaat ggtgcgtcat atttttact tttaaagtact tacgtgtgag taagtgtaa gaaatgattg cttatcagta gtatcaatga tttactcaat atctgaatca ccttgattca gaaccatttc agctgtttca ccatcagtc atgaataaca gcctcattga tgtcaaaaac ttcaatatcc acttctttca gcctactgta gactctggaa gtatactttt tgcatatgta aggaagtcag atttttttt	Homo sapiens
73	CXC	NM_001504	LVCKKLRIT DVYLLNALS DLLEVFSPFF QTYLLDQWV FGTVMCKVVS GFYIIGFYSS MFFITLMSVD RYLAHVAVY ALKVRTIRMG TTLCLAVWLT AIMATIPLLV FYQVASEDGV LQCYSFYNQ TLWKIFTNF KMNILGLLIP FTIFMFCYIK ILHQLKRCQN HNKTKAIRLV LIVIASLLE WVPFNVLFL TSLHSMHILD GCSISQULTY ATHVTEIISF THCCVNPVIY AFVGEKFKKH LSEIFQKSCS QIFNYLGRQM PRESCEKSS CQHSRSSSS VDYL ccaaccacaa gcaccaagc agaggggagc gcagcacacc acccagcagc cagagcacca A gccagccat ggtccttgag gtgagtacc accaagtgt aatgacgcc gaggttgccg ccctcctgga gaactcagc tcttccctatg actatggaga aaacagagat gactcgtgct gtacctccc gccctgccc caggacttca gcctgaactt cgaccgggcc ttctcgccag ccctctacag cctcctcttt ctgctggggc tgctgggcaa cggcgcggtg gcagccgtgc tgctgagccg gcggacagcc ctgagcagca ccgacacct cctgctccac ctgactgtag cagacacgct gctggtgctg acactgcccg tctgggagc gtgagctgcc gtccagtggg tctttggctc tggcctctgc aaagtggcag gtgcccctctt caacatcaac ttctacgcag	Homo sapiens

74	CXC Chemokine Receptor 3	NP_001495.1	<p>gagccctcct gctggcctgc atcagctttg accgtacat gaacatagtt catgccaccc  agctctaccg ccggggggccc ccggcccgcc tgacctcac ctgcctggt gtctgggggc  tctgcctgct ttctgccctc ccagacttca tcttctctgc gcccaccac gacgagcgcc  tcaacgccac ccaactgcaa tacaacttcc cacagtggtg ccgacggct ctgcgggtgc  tgacgtggt gctggctttt tccagggcc agcgccctc tgctggtcat cggctgggtg  tctggccgt gctggccttt gccctgctt ggaaccccta tcactgggtg gtgctgggtg  tggtggtcgt ggtggccttt gccctgctt ggaaccccta tcactgggtg gtgctgggtg  acatcctcat ggacctgggc gctttggccc gcaactgtgg ccgagaaaag aggttagacg  tgccaaagtc ggtcacctca ggcctgggct acatgcactg ctgcctaac ccgtgctct  atgcctttgt aggggtcaag ttccgggagc ggatgtggat gctgctctg cgctgggct  gcccacaaca gagaggctc cagaggcagc catgtcttc ccgcccggat tcatcctggt  ctgagacctc agaggcctcc tactggggt tbtgaggccg gaatccgggc tcccccttg  ccacagctct gacttccccg cattccaggc tcttccctcc ctctgcggc tctggtcttc  cccaatatcc tgcctcccg gactcactgg cagccccagc accaccaggt ctcccgggaa  gccaccctcc cagctctgag gactgcacca ttgctgtctc ttagctgcca agccccatcc  tgccgcccga ggtggctgcc tggagcccca ctgcccctct catttgaaa ctaaaacttc  atcttcccca agtgcgggga gtacaaggca tggcgtgccc catgaagcca  cagccaggc ctccagctca gcagtactg tggcctaggt ccccaagacc tctatatgtg  ctcttttatt tttatgtcta aaatctgct taaaacttt caataaaca caatgcagg  acaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa</p>	Homo sapiens
75	CXC Chemokine Receptor 4	NM_003467	<p>gtttgttggc tgcggcagca ggtagcaaa ggtagcggag ggcctgagtg ctccagtagc A  caccgcatct ggagaaccag cggttaccat ggagggggac agtatataca cttcagataa  ctacaccgag gaaatgggct caggggacta tgactccatg aaggaacctt gtttccgtga  agaaaatgct aatttcaata aaatcttctt gccaccatc tactccatca tcttcttaac  tggaattgtg ggcaatggat tggctatcct ggtcatgggt taccagaaga aactgagaag  catgacggac aagtacaggc tgcacctgtc agtggccgac ctctcttttg tcatcacgct  tcccttctgg gcagttgatg ccgtggcaaa ctggtacttt gggaacttcc tatgcaaggc  agtccatgtc atctacacag tcaacctcta cagcagtgct ctcatcctgg ccttcatcag  tctggaccgc tacttgcca tctgtccacgc cacaacagt cagaggccaa ggaagctgtt  ggctgaaaaa gtggtctatg ttggcgctcg gatccctgcc ctctgtctga ctattccccg  cttcatcttt gccaacgtca gtgaggcaga tgacagatat atctgtgacc gcttctaccc  caatgacttg tgggtggttg tgttccagtt tccagcacatc atggttggtc ttatccctgc  tggtattgtc atctgtctct gctattgcat tatcatctcc aagctgtcac actccaaagg  ccaccagaag cgcaaggccc tcaagaccac agtcatctct atcttggtt tcttgcctg</p>	Homo sapiens



76	CXC Chemokine Receptor 4	NP_003458.1	<p>ttggctgctt tactacattg ggatcagcat cgactccttc atcctcctgg aaatcatcaa gcaagggtgt gaggttttaga acactgtgca caagtggatt tccatcacgg aggccttagc tttcttccac tgggtgtctga acccctcct ctatgcttct cttggagcca aatttaaac ctctgcccag cagcactca cctctgtgag cagagggtcc agcctcaaga tccctccaa aggaaagcga ggtggacatt catctgttct cactgagctt gactctcaa gtttccactc cagtaaacac agatgtaaaa gactttttt taccagataa ataactttt ttaagttac acatttttca gatataaaa agtaccacat attgtacagt ttttattgtt tttggattt ttgtcttctg tttctttagt tttgtgaag tttaattgac ttatttatat aaatttttt tgttcatat tgatgtgtgt ctaggcagga cctgtggcca agttcttagt tgctgtatgt ctcgtggtag gactgtagaa aagggaactg aacattccag agcgtgtagt gaatcacgta aagctagaaa tgatccccag ctgtttatgc atagataatc tctccattcc cgtggaactg tttctctgtt cttaaagact gattttgctg tagaagatgg cacttataac caaagcccaa agtggatatg aaatgctggt ttttcagttt tcaggagtggt gttgatttca gcacctacag tgtacagctt tgtattaagt ttttaataaa agtacaatgt aaacttactt agtggttat LVMGYQKKLR SMTDKYRLHL SVADLLFVIT LPFWAVDAVA NWYFGNFLCK AVHVIYTVNL YSSVLIILAFI SLDRYLAIVH ATNSQRPRL LAEKVVYGV WIPALLLTIP DFIFANVSEA DDRYICDRFY PNDLWVVFQ FQHIMVGLIL PGIVILSCY IISKLSHSK GHQRRKALKT TVILILAFFA CWLPYYIGIS IDSFILLEII KQCEFCENTV HKWISITEAL AFFHCCLNPI LYAFLGAKFK TSAQHALTSV SRGSSLIKLS KGRGSHSSV STESESSFH SS</p>	Homo sapiens
77	Complement Component 3a Receptor 1	NM_004054	<p>atggcgctct tctctgctga gaccaattca actgacctac tctcacagcc atggaatgag A ccccagtaa ttctctccat ggtcattctc agccttactt ttttactggg attgccaggc aatgggctgg tgcgtggggt ggctggcctg aagatgcagc ggacagtga cacaatttgg ttctccacc tcaacttggc ggacctctc tgcgtcctct ccttgccctt ctgctggct cacttggctc tccagggaca gtggccctac ggcaggttcc tatgcaagct catccccctc atcattgtcc tcaacatgtt tgccagtgc ttctgtctta ctgccattag cctggatcgc tgtcttggg tattcaagcc aatctggtgt cagaatcatc gcaatgtagg gatggcctgc tctatctgtg gatgtatctg ggtggtggct ttgtgatgt gcatctctgt ttctgtgtac cgggaaatct tcactacaga caaccataat agatgtggct acaaatattgg tctctccagc tcattagatt atccagactt ttatggagat ccactagaaa acaggctctt tgaataacatt gttcagccgc ctggagaaat gaatgatagg ttagatcctt cctctttcca acaaatgat catccttga cagtcaccac tgtcttccaa cctcaaacat ttcaagacc ttctgcagat tcactcccta ggggttctgc taggttaaca agtcaaatc tgtattctaa tgtatttaa cctgctgatg tgggtctacc taaatcccc agtgggttct ctattgaaga tcacgaaccc agccactgg ataactctga tgcctttctc tctactcatt taaagctgtt ccttagcgt tctagcaatt ccttctacga gtctgagcta ccacaaggtt tccaggatta ttacaattta ggccaattca cagatgacga tcaagtcca acaccctcg tggcaataac gatcactagg ctagtgggtg gtttctgtct gccctctgtt atcatgatag cctgtttacag ctctattgtc ttccgaatgc aaaggggccc ctccgccaag tctcagagca aaacctttcg agtggccgtg gtgggtgggtg ctgtcttctt tgcctgtgg actccatacc acatttttgg agtccctgtca ttgcttactg acccagaaac tcccttgggg aaaactctga tgccttggga tcatgtatgc</p>	Homo sapiens

78	755	Complement Component 3a Receptor 1	NP_004045.1	<p>actgtgtga</p> <p>TDLLSQPWNE PPVILSMVIL SLTFLLGLPG NGLVLWVAGL KMQRVTNTIWP</p> <p>FLHLTLADLL CCLSLPFSIA HLAHQGWPY GRFLCKLIPS IIVLNMFAV FLTLAISLDR</p> <p>CLVFKPIWC QNHRNVGMAC SICGCIWVA FVMCIPVFVY REIFTDNHN RCGYKFGLS</p> <p>SLDYPDFYGD PLENRSLENI VQPPGEMNDR LDPSSFQTNH HPWTVPVTFQ PQTFQPSAD</p> <p>SLPRGSARLT SQNLYSNVFK RADVVSPIK SGFPIEDHET SPLDNSDAFL STHLKLFP</p> <p>SSNSFYSEL PQGFQDYNL QFTDDDDQVP TPLVAITIR LVVGFLLPSV IMIACYSFIV</p> <p>ERMQRGRFAK SQSKTRFVAV VVAVFLVCW TPYHIFGVLS LLTDPETPLG KTLMSWDHVC</p> <p>IALASANSCT NPFLYALLGK DFRKKARQSI QGILEAAFSE ELTRSTHCPS NNVISERNST</p>	Homo sapiens
79	758	Complement Component 5a Receptor 1	NM_001736	<p>TV</p> <p>agggggagcc caggagacca gaacatgaac tccttcaatt ataccacccc tgattatggg</p> <p>cactatgatg acaaggatac cctggacctc aacaccccctg tggataaaac ttctaacacg</p> <p>ctgctgttc cagacatcct ggccttggtc atctttgag tcgtcttctt ggtgggagtg</p> <p>ctgggcaatg cctgggtggt ctgggtgacg cacttgaggg ccaagcgac catcaatgcc</p> <p>atctgttcc tcaacttggc gtagccgac ttctctctct gctggcgct gcccattctg</p> <p>ttcacgtcca ttgtacagca tcaccactgg ccttttggcg gggccgcctg cagcatcctg</p> <p>ccctccctca tctgtctcaa catgtacgcc agcatcctgc tctggccac catcagcgcc</p> <p>gaccgcttc tctgtgtgtt taaacccatc tgggtgccaga acttcgaggg ggcgggcttg</p> <p>gctggatcg cctgtgcccgt ggcttgggtt ttagccctgc tctgacct accctcttc</p> <p>ctgtaccggg tgggtccggga ggagtacttt ccacaaaagg tgttgtgtg cgtggactac</p> <p>agccacgaca aacggcgagg gtagccgtg gccatcgtcc gctgggtcct gggcttctctg</p> <p>tgccctctac tcacgtcac gatttgttac actttcatcc tgctccggac gtggagcgc</p> <p>agggccacgc ggtccaccaa gacactcaag gtgtggtgg cagtgtggc cagtttcttt</p> <p>atcttctggt tgcctacca ggtgacggg ataagtatgt ccttcttga gccatcgtca</p> <p>cccaccttc tctgtgtgaa taagtggac tctctgtgtg tctctttgc ctacatcaac</p> <p>tgctgcata acccatcat ctacgtggtg gccggccagg gcttccagg cagactgcgg</p> <p>aaatccctcc ccagctcct ccggaacgtg ttgactgaag agtccgtggt tagggagagc</p> <p>aagtcattca cggctccac agtgacact atggccaga agaccaggc agtgtaggcg</p> <p>acagcctcat gggccactgt ggcccgatgt ccccttctt cccggccatt ctccctctg</p> <p>tttccactc acttttctg ggatggtgtt acctagcta actaaactc ctccatgttg</p> <p>cctgtcttcc ccagacttgt cctctcttt ccagggggac tcttctcat ctctctcatt</p> <p>tgcaaggatga acacttctt ctaggagaca ccttccccc cccacacac</p> <p>catctttcca tcccaggctt ttgaaaaa aacagaaaa cgtgtatctg ggatatttcc</p> <p>atatggcaat aggtgtgaac agggaaactca gaatacagac aagttagaag attctcgctt</p> <p>aaaaaaatgt attatttta tggcaagtgt gaaaatatgt aactgggaat tcaaaagttc</p> <p>tttgggacaa aacagaagtc catggagtta tctaagctct tgtaagttag ttaatttaaa</p> <p>aaagaaaaat aggtgtgagag cagtggctca cgcctgtaat ccagaaactt tgggaggtta</p> <p>aggtgggtgg atcactgag gtcaagagtt ccagaccagg ctggccagca tgggtgaaacc</p>	Homo sapiens

80	768	Complement Component 5a Receptor 1	NP_001727.1	<p> cgtctgtac taaaaataca aaaaattaac tgggcatggt agtgggtgcc tgtaatccca  gttacttggg aggtgaggt gggagaattg ctggaacctt ggagtgagg gttgtggtga  gcatgatcg caccactgca ctctagcctg ggtgaccgag ggaggtctcg tctcaaaagc  aaagcaaaa caaaaacaaa aacacctaaa aacctgcag tttgtttgt acttgtttt  taaatatgc ttctatttt gagatcattg caacctcaac acaattgtaa gtaatgatac  agaggatct tgtgtacct tcaccagcc tcccccaatg gcaacatctt gcaaaactac  aatgtagtct cataaccagg atattgacat tgatacagtg agatacagg acattctcat  caccacagg atccccagg atccccactt cctccacccc cacaccccag ccgtgtccct  aaccctggc aaccaggat ccaactctca ttctataat gttgtcatt caagaatgtt  attcaatgga atcatatagt atgtaacctg ttttgagctt aaaaaaaa gtatacatga  ctttaatgag gaaaaataaa atgaatatg aaaaaaaa ctttagag  MNSFNYYTPD YGHYDDKDTL DLNTPVDKTS NTLRVPDILA LVIFAVVFLV GVLGNALVWV P  VTAFAEKRTI NAIWFLNLAV ADFLSCLALP ILFTSIVQHH HWPFGGAACS ILPSLILNM  YASILLLATI SADRELLVFK PIWCQNERGA GLAWIACAVA WGLALLLTIP SFLYRVVREE  YFPPKVLGV DYSHDKRRER AVAIVRLVG FLWPLLTLTI CYTFILLRTW SRRATRSKT  LKVVAVVAS FFIFWLPYQV TGIMMSFLEP ESKESTRSTV DTMQKTQAV  VWAGGFQGR LRKSLPSLLR NVLTEESVVR  gcacgagga acaacctctc tctctcagc agagagtgtc acctctgct ttaggacct A  caagctctgc taactgaatc tcaactaat tgcaggatca cattgcaaa agcttcaact sapiens  ttcccacctt gcttgggt aaatctctc tggggaatc cagaaagtaa agttccatcc  tgagaatatt tcacaaagaa ttctcttaag agtggactg ggtcttgacc cctggaattt  aagaaattct taagacaat gtcaaatatg atcaagaga aaatgtgatt tgagtctgga  gacaattgtg catatcgtct aataataaaa acccatacta gcctatagaa acaaatatt  gaataataaa aaccatact agcctataga aacaatatt tgaagattg ctaccactaa  aaagaaaact actacaact gacaagactg ctgcaaaact caattggtca ccacaactg  acaaggttg tataaaacaa gattgtaca actctagt ttatgtatc agcatattc  atttgggctt aatgatggag aaaaagtga cctgtattt tctggtctc ttgctttt  ttatgattct tgttacagca gaattagaag agagtctga ggaactcaatt cagttgggag  ttactagaaa taaatcatg acagctcaat atgaatgta ccaaaagatt atgcaagacc  ccattcaaca agcagaaggc gtttactga acagaacctg ggaatggtg ctctgctgga  acgatgttg acgaggaact gaatcaatgc agctctgcc tgattactt caggactttg  atccatcaga aaaagtaca agatctgtg accaagatgg aaactggtt agacatccag  caagcaacag aacatggaca aattataccc agtgaatgt taacacccc gagaaagtga  agactgcaat aaattgttt tacctgacca taattggaca cggattgtct atgcatcac  tgcttatctc gcttggcata ttcttttatt tcaagagcct aagttgcca aggattacct  tacacaaaaa tctgttcttc tcaattgttt gtaactctgt tgtaacaatc attcacctca  ctgcagtggc caacaaccag gccttagtag ccacaaatcc tgtagttgc aaagtgtccc  agttcattca tctttacctg atgggctga attactttg gatgctctgt gaaggcattt  acctacacac actcattgtg gtggccgtgt ttgcagagaa gcaacattta atgtggtatt  atcttcttgg ctggggattt ccaatgattc ctgctgtat acatgccatt gctagaagct  tatattacaa tgacaattgc tggatcagtt ctgataccca tctcctctac attatccatg </p>	Homo sapiens
81	767	Calcitonin Receptor- like Receptor	NM_005795	<p> ttaggacct A  cttcaact sapiens  agttccatcc  cctggaattt  tgagtctgga  aacaatatt  ctaccactaa  ccacaactg  agcatattc  ttgctttt  cagttgggag  ccaaaagatt  ctctgctgga  tgattactt  caggactttg  agacatccag  gagaaagtga  atgcatcac  aggattacct  attcacctca  aaagtgtccc  gaaggcattt  atgtggtatt  gctagaagct  attatccatg </p>	Homo sapiens

82	767	Calcitonin Receptor- like Receptor	NP_005786.1	<p>gccccatttg tgctgcttta ctggtgaatc tttttttctt gttaaatatt gtaagcgttc</p> <p>tcatacccaa gttaaaagtt acacaccaag cggaatccaa tctgtacatg aaagctgtga</p> <p>gagctactct tatcttggtg ccattgcttg gcattgaatt tgtgctgatt ccattgctgac</p> <p>ctgaaggaaa gattgcagag gaggatatg actacatcat gcacatcctt atgcacttcc</p> <p>agggtctttt ggtctctacc atttctgct tctttaatgg agaggttcaa gcaattctga</p> <p>gaagaaactg gaatcaatc aaaaatccaa ttggaaacag cttttccaa cagaagctc</p> <p>ttcgtagtgc gtcttacaca gtgtcaacaa tccatgatatg tccaggttat agtcattgact</p> <p>gtcctagtga acacttaaat ggaataagca tccatgatatg tgaataatgtt cttttaaacc</p> <p>cagaaaaatt atataattga aaatagaagg atggttgtct cactgtttgg tgccttctct</p> <p>aactcaaggc cttggaccca tgactctgta gccagaagac ttcaatatta aatgactttg</p> <p>gggaatgtca taaagaagag ccttcacatg aaattagtag tgtgtgata agagtgtaac</p> <p>atccagctct atgtgggaaa aaagaaatcc tggtttgtaa tgtttgtcag taaatactcc</p> <p>cactatgctt gatgtgacgc tactaacctg acatcaccaa gtgtggaatt ggagaaaagc</p> <p>acaatcaact tttctgagct ggtgtaagcc agttccagca caccattgat gaattcaaac</p> <p>aaatggctgt aaaaactaac atacatgttg gccatgattc tacccttatt cscctcaaga</p> <p>gacctagcta aggtctataa acatgaaggg aaaaattagct tttagtttta aaactcttta</p> <p>tcccatcttg attggggcag ttgacttttt tttttccca gactgccgta gtcccttttg</p> <p>taactacctt ctcaaatgga caataccaga agtgaattat cctgctggc tttcttttct</p> <p>ctatgaaaaa caactgagta caattgttat gatctactca tttgctgaca cctcagttat</p> <p>atcttggtgc atatccattg tggaaactgg atgaacagga tgtataatat gcaatcttac</p> <p>ttctatatca ttaggaaaac atcttagttg atgctacaaa acacctgtc aacctcttc</p> <p>tgtcttacca aacagtggga gggaattcct agctgtaaat ataaatttg ccttccatt</p> <p>tctactgtat aaacaaatta gcaatcattt tatataaaga aaatcaatga aggatttctt</p> <p>atcttcttgg aattttgtaa aaagaaattg tgaataatga gcttgtaaat actccattat</p> <p>tttattttat agtctcaaat caaatacata caacctatgt aatttttaa gcaaatatat</p> <p>aatgcaacaa tgtgtgtatg ttaatatctg atactgtatc tgggctgatt ttttaataaa</p> <p>aatagagtct ggaatgct</p>	Homo sapiens
83	832	Cannabinoid Receptor 1	NM_001840	<p>MEKKCTLYFL VLPFFMILV TAELEESPED SIQLGVTRNK IMTAQYECYQ KIMQDPIQQA P</p> <p>EGVYCNRTWD GWLCWNDVAA GTESMQLCPD YFQDFPSEK VTKICDQDGN WFRHPASNRT</p> <p>WTNYTQCNVN THEKVKTAI N LFYLTIIHG LSIASLLISL GIFFYFKSL S QORITLHKNL</p> <p>FFSEVCNSV TIIHLTAVAN NQALVATNPV SCRVSQFIHL YLMGCNYFWM LCEGIYHLTL</p> <p>IWAVFAEKQ HLMWYFLGW GFPLIPACIH AIARSLYND NCWISSDTHL LYIIHGPICA</p> <p>ALLVNLFFLL NIVRVLTIKL KVTHQAESNL YMKAVRATLI LVPLLGIEFV LIPWRPEGKI</p> <p>AEVYDYIMH ILMHFQGLLV STIFCFNGE VQAILRNWN QYKIQFGNSF SNSEALRSAS</p> <p>YTVSTISDGP GYSHDCPSEH LNKSIHDIE NVLLKPENLY N</p> <p>ggggactacg gagagctctg caggagagccg agggccccgc ccgggccaag ggagcttctg A</p> <p>tccccaggac cagggatgc gaaggattg cccccctgtg gtcactttct cagtcatttt</p> <p>gagctcagcc taatcaaga ctgaggttat gaagtcgac ctagatggcc ttgcagatac</p> <p>caccttccgc accatcaca ctgacctcct gtacgtgggc tcaaatgaca ttcagtagca</p> <p>agacatcaa ggtgacatgg catccaaatt aggttacttc ccacagaaat tcccttaac</p> <p>ttccttttag ggaagtcctt tccaagagaa gatgactgog ggagacaacc ccagctagt</p>	Homo sapiens

84	Cannabinoid Receptor 1	NP_001831.1	<p>ccagcagac caggtgaaca ttacagaatt ttacaacaag tctctctcgt ccttcaagga  gaatgaggag aacatccagt gtggggagaa cttcatggac atagagtgtt tcatgtcct  gaacccagc cagcagctgg ccattgcagt cctgtccctc acgtgggca ccttcacggt  cctggagaac ctcctggtgc gcctggcgtt gtcggtcat cctccactcc cgcagcctcc gctcagggcc  ttcctaccac ttcacgcgga cctggttcca cgtgttcca cgcgaagat agcgcgaacg tgttctgtt  ctacagcttc attgacttcc cctccttcc ctccttccat ggcagcctgt tcttcacagc  caactgggt ggggtcacgg cctccttcc tgcctcctat agcagcctgt tccacagggc  catgacagg tacatatcca ttcacaggcc cctggcctat aagaggattg tccacagggc  caaggccgtg gtggcgtttt gcctgatgtg gaccatagcc attgtgatcg ccgtgctgcc  tctcctgggc tggaactgcg agaaactgca atctgtttgc tcagacattt tcccacacat  tgatgaacc tacctgatgt tctggatcgg ggtcaccagc gtactgttc tgttcacgt  gtatgcgtac atgtatatc tctggaaggc tccacggcc gccgtccgca tgattcagcg  tggcaccag aagagcatca tcatccacac gtctgaggat gggaaggtag aggtgaccog  gccagaccaa gcccgcatgg acattaggtt agccaagacc ctggtcctga tctgtgtgt  gttgatcatc tgctggggcc cctgtcctgc aatcatggtg tatgatgtct ttgggaagat  gaacaagctc attaagacgg tgtttgcatt ctgcagtagt ctctgcctgc tgaactccac  cgtgaacccc atcatctatg cctcgaggag taaggacctg gcacacgctt tccggagcat  gttccctct tgtgaaggca ctgcgcagcc tctggataac agcatggggg actcggactg  cctgcacaaa cagcaaaaca atgcagccag tttcagcagg gccgcagaaa cctgcacaa  gagcacggtc aagattgcca agttaaccat gtctgtgtcc acagacacgt ctgccgaggc  tctgtgagcc tgatgcctcc cgtggcagcac aggaagaaagaa tttttttt taagctcaaa  atctagaaga gtctattgtc tcttggtta tatttttta actttaccat gctcaatgaa  aagtgattg ccacatgtca cttattgtct tagttccgt ttgggctaact ctccggggg  tcgtaggaaa ccttt</p>	Homo sapiens
832	Cannabinoid Receptor 2	NM_001841	<p>KMTAGDNPQL VPADQWNITE FYNKSLSEFK ENEENIQCGE NFMDECFMV LNPSQQLALA  VLSLTGLGTF VLENLLVLCV ILHSRSLRCR PSYHFIGSLA VADLLGSVIF VYSFIDFHFV  HRKDSRNVEL FKLGVTASF TASVGSLELT AIDRYISIRH PLAYKRIVTR PKAVVAFCLM  WTIAIVIAVL PLLGNCEKL QSVCSDFPH IDETYLMFWI GVTSVLLLEI VYAYMYILWK  AHSHAVRMIO RGTQKSIH TSEDGKVQVT RPDQARMDIR LAKTLVLILV VLIICWGPLL  AIMVYDVFGK MNKLIKTVFA FCSMLCLLNS TVNPIIYALR SKDLRHAERS MFPSCEGTAQ  PLDNSMGDSD CLHKHANNA SVHRAAESCI KSTVKIAKVT MSVSTDTSAE AL</p>	Homo sapiens
85	Cannabinoid Receptor 2	NM_001841	<p>caggtcctgg gagaggacag aaaaacactg gactcctcag cccccggcag ctcccagtcg A  ccagccacc acaacacaa ccaagcctt ctgacaaagc tcaagtggat ctgaagggcc  caccatgg aggaatgctg ggtgacagag atagcaaatg gctccaaagg tggcttgat  tccaaacctt tgaaggatta catgatcctg agtggctccc agaagacagc tgttgcctg  ttgtgcactc ttctggcct gctaagtgc cttggagaac tggctgtgct ctatctgac  ctgtcctccc accaactccg ccggaagccc tcatacctgt tcaattggcag cttggctggg  gctgacttcc tggccagtgt ggtctttgca tgcagctttg tgaatttcca tgttttccat  ggtgtggatt ccaaggctgt cttcctgctg aagatggga cgtgactat gacctcaca  gcctctgtg gtagcctcct gctgaccgcc attgaccgat acctctgct gcgctatcca</p>	Homo sapiens

Accession	Gene	Protein	Species
86	Cannabinoid Receptor 2	NP_001832.1	Homo sapiens
87	Leukocyte Antigen CD97	NM_001784	Homo sapiens
88			
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88	922	Leukocyte Antigen CD97	NP_001775.1	<p> cactacatt tcccttcga acacagagct gacctgatg atccaggagc ggggggacaa  gaagtcact atgggtcaga gacgcgacg catgaagctg aattggctg tggcagctgg  agccaggat ccaggccccc cgtggcggg catcctctcc atccagaaca tgacgacatt  gctggccaat gcctccttga acctgcattc caagaagcaa gccgaactgg aggagatata  tgaagcagc atccgtggtg tccaactcag acgcctctct gccgtcaact ccatcttct  gagccacaac aacaccaag aactcaactc cccatcctt ttcgccttct cccacttga  gtctccgat ggggaggcgg gaagagacc tctgccaag gactgatgc ctggccaag  gcaggagtgc ctctgtgctt tctggaagag tgacagcagc agggagggc actgggccac  cgaggtctgc caggtgctgg gcagcaagaa cggcagcacc acctgccaat gcagccact  gagcagcttt acgataccta tggctcatta tgactggag gactggaagc tgacctgat  caccagggtg ggaactggcg tgtaactctt ctgctgctg ctgtgcatcc tcaattctt  gctggtgcgg cccatccagg gctcgcgac caccatacac ctgcacctct gcactgcct  cttctgtggc tccaccatct tctggcggg catcgagaac gaaggcgcc agtggggct  gcgtgccgc ctggtggccg ggtgctgca ctactgttct ctggcgcct tctgtggat  gagcctcgaa ggcctggagc tctactttct tgtgtgctgc gtgtccaag gccagggct  gagtaacgc tggtctgccc tgatcggcta tggcgtgccc ctgctcatcg tggcgtctc  ggctgccatc tacagcaagg gctacggcg cccagatac tgctggttg acttgagca  gggttctctc tggagcttct tgggacctgt gacctctac atttgtgca atgtgtcat  ttctgtgact accgtctgga agctcactca gaagtttctt gaaatcaatc cagacatgaa  gaaattaaag aaggcaggg cgctgacct cagggccatc gcgcagctct tccgttggg  ctgcacctgg gtctttggcc tgttcatctt cgacgatcgg agcttggtgc tgacctatgt  gtttaccatc ctcaactgcc tgcagggcgc ctctctctac ctgctgcat gcctgctcaa  caagaaggtt cgggaagaat accggaagt ggcctgccta gttgctggg ggagcaagta  ctcagaattc acctccacca cgtctggcac tggccacaat cagaccggg cctcagggc  atcagagtcc ggcataatgaa ggcgcatggt tctggacggc ccagcagctc ctgtggccac  agcagctttg tacacgaaga ccatccatcc tccctctgct caccactcta ctccctccac  cctccctccc tgatcccgtg tgccaccagg agggagtggc agctatagtc tggcaccaaa  gtccaggaca ccagtgggg tggagtggga gccactggtc ctgctgctgg ctgcctctct  gtccacctt tgacccagg gtggggacag ggcctggccc agggctgcaa tgcagcatgt  tgccctggca cctgtggcca gtactcggga cagactaagg gcgcttctcc catcctggac  ttttcctctc atgtctttgc tgcagaactg aagagactag gcgctggggc tcagcttccc  tcttaagcta agactgatgt cagaggcccc atggcaggc ccttggggc cactgcctga  ggctcacggt acagaggcct gccctgcctg gccggggcagg aggttctcac tgtgtgaa  gtgtagacg ttgtgtaatg tgttttatc tgttaaat tttcagtgtt gacacttaaa  attaaacaca tgcatacaga aaaaaaaaaa aaaaaaaaaa a </p>	<p> FSEIITPTE P  ACRCNPGFSS FSEIITPTE P  ENTCQDVDEC  TVCEDMTFT WTTPPGVHSQ  DVEALAPPVR HLIATQLLSN  MGQSSARMKL NWAVAAGAE  IRGVQLRLS AVNSIFLSH </p>	Homo sapiens
88	922	Leukocyte Antigen CD97	NP_001775.1	<p> MGRVFLAFC VWLTLPGAET QDSRGCARWC PQNSSCVNAT ACRCNPGFSS FSEIITPTE P  TCDDINECAT PSKVSCKKFS DCWNTEGSY SCRCRPGWKP RHGIPNNQKD TVCEDMTFT WTTPPGVHSQ  SSGQHQCDSS TVCFNTVGSY AEVTIQNVIK LVDELMEAPG DVEALAPPVR HLIATQLLSN  TLSRFFDKVQ DLGRDSKTSS SPSNTELTLM IQERGDKNVT MGQSSARMKL NWAVAAGAE  LEDIMRILAK SLPKGFTYI ASLNLSKKQ AELEEIYESS IRGVQLRLS AVNSIFLSH  PGPAVAGILS IQNMTLLAN </p>		

89	941	EMR1 Hormone NM_001974 Receptor	NTKELNSPIL FAFSHLESSD GEAGRDPAPK DVNPGPRQEL LCAFWKSDSD RGGHWATEVC QVLGSKNGST TCQCSHLSFF TILMAHYDVE DWKLTILTRV GLALSFLCLL LCILTFLLVR PIQSRRTIH LHLCICLFVG STIFLAGIEN EGGQVGLRCR LVAGLLHYCF LA AFCWMSLE GLELYFLVVR VFQOGLSTR WLCLIGYGPV LLIVGSAAI YSKGYGRPRY CWLDFEQGFL WSFLGPVTFI ILCNAVIFVT TWKLTQKFS EINPDMKKLK KARALITAI AQLFLLGCTW VFGLFIFDDR SILVTYVFTI LNCLOGAFLY LLHCLLNKKV REEYRKWACL VAGGSKYSEF TSTTSGTGHN QTRALRASES GI	Homo sapiens
			ctaaagtgtt ttctcttgaa tgacagaact acagcataat gcgtggcttc aacctgtcc A tcttctggg atgtgtgtgt atgcacagct gggaaggga cataagacc acacggaac caaacacaaa gggtaataac tgtagagaca gtacctgtg cccagcttat gccacctgca ccaatacggg ggacagttac tattgcactt gcaacaagg cttcctgtcc agcaatgggc aaaatcactt caaggatcca ggagtgcgt gcaagatat tgatgaatgt tctcaagcc ccagccctg tggctctaac tcactctgca aaaactgtc agggaggtag aagtgcagct gtttagatgg ttctcttctt cccactggaa atgactgggt cccaggaaa cgggcaatt tctcctgtac tgatatcaat gactgcctca ccagcagggt ctgccctgag cattctgact gtgtcaactc catgggaagc tacagttgca gctgtcaagt tggattcatc tctagaaact ccactgtga agactggaat gaattgtcag atccaagagc ttgccagag catgcaactt gtaataaac tgttggaac tactctgtt tctgcaacc aggattgaa tccagcagt gccacttgag ttgccagggt ctcaaaagcat cgttggaaga tattgatgaa tgcactgaa tgtgccccat caattcaaca tgaccaca cctctgggag ctactttgc acctgccacc ctggctttgc accaagcagt ggacagttga atttcacaga ccaaggagtg gaattgtag atattgata gtgcgccaa gatccatcaa cctgtgtgtc taattctatc tgcaccaatg ccctgggtc ctacagctgt ggctgcattg taggctttca tcccaatcca gaaggctccc agaaagatgg caacttcagc tgccaaaagg ttctcttcaa atgtaaggaa gatgtgatac ccgataataa gcagatccag caatgccaa agggaaaccgc agtgaacct gcatatgtct ccttttgtc acaataaat acatcttca gcgttctgga caaagtgtg gaaaaataaa cgaccgtagt ttctctgaag aatacaactg agagctttgt cctgtgtctt aaacaaatat ccatgtggac taaattcacc aaggaagaga cgtcctccct ggccacagtc ttcctggaga gtgtggaag catgacactg gcatctttt ggaaaccctc agcaaatgtc actcggctg ttcgggcgga atacttagac attgagagca aagttatcaa caaagaatgc agtgaagaga atgtgacgtt gacttggtg gccaaagggtg ataagatgaa gatcgggtgt tccacaattg aggaatctga atccacagag accactggtg tggctttgt ctcctttgtg ggcatggaat cggttttaaa tgagcgttc ttccaagacc accaggctcc cttgaccacc tctgagatca agctgaagat gaattctcga gtctgtggg gcataatgac tggagagaag aaagacggct tctcagatcc aatcatctac actctggaga acgttcagcc aaagcagaag tttgagaggc ccatctgtgt ttcttgagc actgatgtga aggttggaag atggacatcc tttggctgtg tgatcctgga agcttctgag acatatacca tctgcagctg taatcagatg gcaaatcttg ccgttatcat ggcgtctggg gagctcacga tggacttttc cttgtacatc attagccatg taggcattat catctccttg gtgtgcctcg tcttgacctc cggcaccttt ctgctgtgtc gtccatccg aaatcaaac acctacctc acctgacct ctgctgtgtg ctctcttgg cgaagactct ctctctgccc ggtatacaca agactgacaa caagacgggc tgcgccatca	



90	941	EMR1 Hormone Receptor	NP_001965.1	MRGENLLLFW GFLSSNGQNH VPGKPGNFSC ACPEHATCNN SYFCTCHPGF HPNPEGQKD DKVCENKTV SANVTPAVRA VSFVGMESVL PKQKFERPIC SLYIISHVGI NKTGCAIIAG PMLVWVISAS SSVNAEVSTL FLIHCLLNGQ ggaacacgac acccctccgc ccacgcgggc gcgagtgaag gcagttcagc tgaatccgc ggacggcagg	cttttctctg agaaacctga gcctttggtt ggctatggaa ttggggccag atcctgaggc ttactgacct atttttcaga ctgcaggggg tacaagaggt ttgctgtcct tgctatggag ctcagcttaa ctcagcttaa gggggcccgc gacctttta aaattcaatg gtgcatgggt caataaatga aaaaaaaaa HIRPTRKPT IDECSPQSP VCPEHSDCN PGFESSGHL DQGVCECRDID KCKEDVIPDN VPVLKQISMW NKECSEENV PLTTSEIKLK RWTSGFCVIL IATFLLCRSI FWMVLEAVIL RCWLNTETGF FAQLFILGCS GKTKPSSQSQ agagtgaga ggggctggcg tcgctctgcc ccagtagggg gtccggggag aggagagggc gtgagagggc gtgagcagct	ctggatgctg ttacttcagc gatgctggg ctgctggctg ataacagaga aactcccttc gcccgaagtct tgcccagctc tgccatccac gaagacgaag acgggtttaa ttcctgcagg aggatccac cagccccaga tgtatgcact ctgcaacttc ttcaattcca ctaccatttt ccctccagcg cctatcatac tttgcgcct gtctgactga tttaccctaa VDSYYCTCKQ GFSSPTGNDW EDVNECADPR INSTCTNTPG SYSCGCIVGF AQINNIFSVL SMTLASFWKP ESTETTGVAF PIIYTLENVQ MASGELTMDF LFLAGIHKTD LHICAFGYGL WTLWILRQRL IINSLOQAFI SASKTG aggaagaccc cctggacagc tcccgaagcg cccgcatgag cactgagactg accaacatct tggccgacac	Homo sapiens
91	965	G Protein-Coupled Receptor GPR30	NM_001505	ggaacacgac acccctccgc ccacgcgggc gcgagtgaag gcagttcagc tgaatccgc ggacggcagg	ctggcttctt agggtggtga atgggctgcc tgcataatcg tttgacacagt agaaggtttc tgaaggtctt ttgacctgt ttgacctgt ccttcactct ggatcactgg ccatgccatc ccacagttga catgaaatg ttcctgtggt tctctgtggt tctctgtgct gcatgaccaa aaacacctgg ctaagcgtgc tttgcgtgct aaaaaaaaa CPAYATCTNT SGRYKCSCLD VGFISRNSTC DIDECTEMCP PNSICTNALG AVKPAYVSFC LATVFLESVE KIGCSTIEES TGEKKDGFSD CNQMANLAVI LCVCLLLAKT NYFSSRNIMK VIVINSLLLT VAGVMAYLFT SASKTG tctccttctg gtgcctgagg cctcatgggc gcgcactcgg gtccggggag ggaggtttat gccctgggtg ccacgcggga ctgtgacagg	aggaagaccc cctggacagc tcccgaagcg cccgcatgag cactgagactg accaacatct tggccgacac	Homo sapiens

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 tcatgtgcgg atcctt

Coupled  
Receptor  
GPR30 sapiens

93 978 Cholecystoki NM\_000730

nin A  
Receptor

Homo  
sapiens

LSCLYTIFFL PIGFVGNILI LVMNISFREK MTIPDLYFIN LAVADLILVA DSLIEVFNH  
ERYDYDIAVLC TMSLFLOVN MYSSVFFLTW MSDFRYIALA RAMRCSLFRT KKHARLSOGL  
IWMASVSATL VPTAVHLQH TDEACFCFAD VREVQWLEVT LGFIVPFALL GLCYSILIVRV  
LVRAHRHRGL RPRRQKALRM ILAVLVFFV CWLPENVFIS VHLQRTQPG AAPCKQSFRR  
AHPLTGHIVN LAAFNSCLN PLIYSFLGET FRDKRLRYIE QKTNLPALNR FCHAALKAVI  
PDSTEQSDVR FSSAV  
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agtggggcca tgattggtt ctaggcagtt caaagcagga tatgttaagt aacactcaac  
catcag

94 978 Cholecystoki NP\_000721.1 MDVVDLSLVN GSNITPPCEL GLENETLFL DQPRPSKEWQ PAVQILLYSL IFLLSVLGNT P  
nina A  
Receptor sapiens

LVITVLIRNK RMRVTNIFL LSLAVSDML CLFCMPFNLI PNLLKDFIFG SAVCKTTTF  
MGTSVSVSTF NLVAISLERY GAICKPLQSR VWQTKSHALK VIAATWCLSF TIMTPYPIYS  
NLVPFTKNNN QTANMCRELL PNDVMQSWH TFLLLILFLI PGIVMMVAYG LISLELYQGI  
KFEASQKKA KERKPTSTSS GKYEDSDGCV LQTRPPRKL ELRQLSTGSS SRANRIRNS  
SAANLMAKKR VIRMLIVV LFFLCWMPIF SANAWRAYDT ASAEERLSGT PISFILLLSY

95	1103	Corticotropin releasing factor Receptor 2	NP_001883	TSSCVNPIIY CFMNRFRILG FMATFPCCPN PGPPGARGEV GEEEEGGTTG ASLSRFSYSH MSASVPPQ	atggacggcg cactgtccca cagcctgtcg gaggccaaact gcagcctggc gctgggtgaa A gagctgtctt tggacggctg ggggccacc ctggaccctcg aggtcccta ctctactgc aacacgacct tggaccagat cggaaactgc ttggcccgcga gcgtgcccgg agccctcgtg gagagggcgt gcccagagta cttaaacggc gtcaagtaca acacgaccgg gaatgcctat cgagaatgct tggagaatgg gacgtgggccc tcaaatgaca actactcaca gtgtgagccc attttggatg caaagcagag gaagtatgac ctgcactacc gcctgcctct tgtcgtcaac tacctgggccc actgcgtatc tgtggcagcc ctggtggccc cctctctgct ttctctggcc ctgcggagca ttgcgtgtct gcggaatgtg attcaactgga acctcatcac cactttatc ctgcgaaatg tcatgtggtt cctgctgcag ctggttgacc atgaagtga cgagagcaat gaggtctggt gccactgcat caccaccatc ttcaactact tegtgtgac caactcttc tggatgtttg tggaaaggctg ctacctgcac acggccattg tcatgaccta ctccactgag cgccctgcga agtgcctctt cctcttcac ggatgtgca tccccttccc catcatcgtc gcctgggcca tcggcaagct ctactatgag aatgaacagt gctggtttg caaggagcct ggcgacctgg tggactacat ctaccaaggc cccatcctt cgtgtctct gatcaattc gtatttctgt tcaacatcgt caggatccta atgacaaagt tacgcgcgtc caccacatcc gagacaatcc agtacaggaa ggcagtgaag gccacctgg tgcctcctgc cctcctgggc atcacctaca tgctcttctt cgtcaatccc ggggaggacg acctgtcaca gatcatgttc atctatttca actccttctt gcagtcgttc cagggtttct tegtgtctgt ctctactgc ttcttcaatg gagaggtgag ctacgcccgt aggaagaggt ggcaccgtg gcaggacct cactcccttc ggtcccat agtcccat ggcccgggc atgtccatcc ctacatcac cacaggatc agcttccaca gcataaagca gacggccgct gtgtgacccc tgggtgcgcc acctgcacag ctcccctgtc ctctccacc ttcttctctt ggtgtctctg tegtggcag gctctcgtg ggcaggagat gggaggggag agaccagctc tccagcctgg caggaaagag ggggtgcggc agccaaaggg gactgcaagg gacaggatg acccctgag aagagccagt cagatgtctg caggcattg cccatcccag ctctcttggc cagggcctta ctgggcccag agcagagaag gacctgtcca acacacacag ctatttatag tagcacacac aggtctccc tgcctactc atggagccag cagccaggca atggtgtggc ctgcaactgg ccttggact ccacactcag tgggtgcctg cagttgggtg ggttaacgcc aagcaaggga tcagtttggc tgccttatcc cagggtgtc acctagagag gctcactgtt acccaccct gttcctgtgt cccctcccca gccatcctc ccgcttggg ggtccatga aggatgcagg ctctccaggc tggcttctc tcttgggaga ccccttctct gcttagtcca cagattagcc aatcaaggaa gacgccatca gggaaagccac atccttagtc aaccagtgc atcgtgcggg gcaaatagag gacgagaggc atggaggagg gaggcgtggg atgggaatag cagaaccacc atgtcttcag tgattgaaac tcatacccca ttgccccttg cctccagtc tccccttcag aaacatctct gctctctgtg aaataaacca tgctcttgg	Homo sapiens
96	1103	Corticotropin releasing factor	NP_001874.1	MDAALLHSLI EANGSLALAE ELLLDGWGPP LDPEGYSYC NTTLDDQIGTC WPSAAGALV P ERPCPEYFNG VKYNTNRNAY RECLENGTWA SKINYSQCEP ILDDKQRYD LHYRIALVN YLGHCVSVAA LVAFLLFLA LRSIRCLRNV IHNWLIITFI LRNVWVFLIQ LVDHEVHESN	atggacggcg cactgtccca cagcctgtcg gaggccaaact gcagcctggc gctgggtgaa A gagctgtctt tggacggctg ggggccacc ctggaccctcg aggtcccta ctctactgc aacacgacct tggaccagat cggaaactgc ttggcccgcga gcgtgcccgg agccctcgtg gagagggcgt gcccagagta cttaaacggc gtcaagtaca acacgaccgg gaatgcctat cgagaatgct tggagaatgg gacgtgggccc tcaaatgaca actactcaca gtgtgagccc attttggatg caaagcagag gaagtatgac ctgcactacc gcctgcctct tgtcgtcaac tacctgggccc actgcgtatc tgtggcagcc ctggtggccc cctctctgct ttctctggcc ctgcggagca ttgcgtgtct gcggaatgtg attcaactgga acctcatcac cactttatc ctgcgaaatg tcatgtggtt cctgctgcag ctggttgacc atgaagtga cgagagcaat gaggtctggt gccactgcat caccaccatc ttcaactact tegtgtgac caactcttc tggatgtttg tggaaaggctg ctacctgcac acggccattg tcatgaccta ctccactgag cgccctgcga agtgcctctt cctcttcac ggatgtgca tccccttccc catcatcgtc gcctgggcca tcggcaagct ctactatgag aatgaacagt gctggtttg caaggagcct ggcgacctgg tggactacat ctaccaaggc cccatcctt cgtgtctct gatcaattc gtatttctgt tcaacatcgt caggatccta atgacaaagt tacgcgcgtc caccacatcc gagacaatcc agtacaggaa ggcagtgaag gccacctgg tgcctcctgc cctcctgggc atcacctaca tgctcttctt cgtcaatccc ggggaggacg acctgtcaca gatcatgttc atctatttca actccttctt gcagtcgttc cagggtttct tegtgtctgt ctctactgc ttcttcaatg gagaggtgag ctacgcccgt aggaagaggt ggcaccgtg gcaggacct cactcccttc ggtcccat agtcccat ggcccgggc atgtccatcc ctacatcac cacaggatc agcttccaca gcataaagca gacggccgct gtgtgacccc tgggtgcgcc acctgcacag ctcccctgtc ctctccacc ttcttctctt ggtgtctctg tegtggcag gctctcgtg ggcaggagat gggaggggag agaccagctc tccagcctgg caggaaagag ggggtgcggc agccaaaggg gactgcaagg gacaggatg acccctgag aagagccagt cagatgtctg caggcattg cccatcccag ctctcttggc cagggcctta ctgggcccag agcagagaag gacctgtcca acacacacag ctatttatag tagcacacac aggtctccc tgcctactc atggagccag cagccaggca atggtgtggc ctgcaactgg ccttggact ccacactcag tgggtgcctg cagttgggtg ggttaacgcc aagcaaggga tcagtttggc tgccttatcc cagggtgtc acctagagag gctcactgtt acccaccct gttcctgtgt cccctcccca gccatcctc ccgcttggg ggtccatga aggatgcagg ctctccaggc tggcttctc tcttgggaga ccccttctct gcttagtcca cagattagcc aatcaaggaa gacgccatca gggaaagccac atccttagtc aaccagtgc atcgtgcggg gcaaatagag gacgagaggc atggaggagg gaggcgtggg atgggaatag cagaaccacc atgtcttcag tgattgaaac tcatacccca ttgccccttg cctccagtc tccccttcag aaacatctct gctctctgtg aaataaacca tgctcttgg	Homo sapiens

Receptor 2

97

1240

Dopamine  
Receptor D1

NM\_000794

EVWCHCITTI FNYFVVTNFF WMFVEGCVLH TAIVMTYSTE RLRKCLFLFI GWCIPFPIIV  
 AWAIGKLYE NEQCWFGEKPE GDLVDYIQG PIILVLLINF VFLENIVRIL MTKLRASSTS  
 ETIQYRKAVK ATILVLLPLIG ITYMLFFVNP GEDDLSQIMF IYFNSFLQSF QGFFVSFVYC  
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 gctgggctca ggcgcgcttc ctcaacgttt cggagcggct gccccagcg aagtcacat  
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 agaattctct gtccaccaca gaaagcaaac agccccgaaa tgtgattgca actgactagc  
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 tctgtgctgc cgttatcagg ttccgacacc tgcgttccaa ggtgaccaa tctttgtca  
 tctccttggc tgtgtcagat ctcttgggtg cagtcctggt catgccctgg aaggcagctgg  
 ctgagattgc tggcttctgg ccttctgggt cctctgttaa catctgggtg gcctttgaca  
 tcatgtgctc cactgcattc atcctcaacc tctgtgtgat cagcgtggac aggtattggg  
 ctatctccag cctttccgg tatgagagaa agatgacccc caaggcagcc ttcactctga  
 tcagtgtggc atggaccttg tctgtactca tctccttcat cccagtgca ctagctggc  
 acaaggcaaa acccaaaagc cctctgatg gaaatggcac tccctggct gagaccatag  
 acaactgtga ctccagcctc agcaggacat atgccaatcc atcctctga ataagctttt  
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 ccacaggtaa tggaaagcct gtcgaatgtt ctcaaccgga agtttctttt aagatgtcct  
 tcaaaagaga aactaaagtc ctgaagactc tgcgtgtgat catgggtgtg tttgtgtgct  
 gttggctacc tttcttcatc ttgaactgca ttttgcctt cgtgggtgtc ggggagacgc  
 agcccttctg cattgattcc aacaccttg acgtgtttgt ggtgtttggg tgggctaatt  
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 tcttaggatg ctacagactt tgccctgcga cgaataatgc catagagacg gtgagtatca  
 ataacaatgg ggccggcgatg ttttccagcc atcatgagcc acgaggctcc atctccaagg  
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 aggaggcagc tggcatcgcc agaccttg agaagctgc cccagcccta tccgtcatat  
 tggactatga cactgacgtc tctctggaga agatccaacc catcacacaa aacggctcagc  
 acccaacctg aactcgaga tgaatcctgc cacacatgct catcccaaaa gctagaggag  
 attgctctgg ggtttgctat taagaaacta aggtacgggt agactctgag gtgtcaggag  
 agccctctgc tgccttccaa cacacaatta actccgttc caatacatatt ccagtgatt

Homo  
sapiens

98	1240	Dopamine Receptor D1	NP_000785.1	<p> MRTLNTSAMD GTGLVVERDF SVRILTACFL SLLILSTLLG NTLVCAAVIR FRHLRSKVTN P  FFVISLAVSD LLVAVLMPW KAVAEIAGFW PFGSFCNIWV AFDIMCSTAS ILNLCVISVD  RYWAISSPFR YERKMTPKAA FILISVAWTL SVLISFIPVQ LSWHKAKPTS PSDGNATSLA  ETIDNCDSSL SRTYAISVV ISFYIPVAIM IVTYRIYRI AQQIRRIAA LERAAVHAKN  CQTTTGNKPK VECSPQESSF KMSFKRETKV LKTLSSVIMGV FVCCWLPFFI LNCILPFCGS  GETQPFCDIS NTFDFVFWFG WANSSLNPII YAFNADFRKA FSTLLGCYRL CPATNNAIET  VSINNNGAAM FSSHHEPRGS ISKECNLVYL IPHAVGSSSED LKKEEAAGIA RPLEKLSPAL  SVILDYTDV SLEKIQTPTQ NGQHPT  ggcacgagggc agggctgaag ttgggacggc gcacagagccg cccctgcagt ccagcccgaa A  atgctgcgcg caggcagcaa cggcaccggc taccgggggc agttcgctct ataccagcag  ctggcgccagg ggaacgcgt ggggggctcg gggggggcac cggcactggg gccctcacag  gtggtcaccc cctgcctgct gaccctactc atcatctgga cccctgctgg caacgtgctg  gtgtgcgcag ccatcgtgcg gagccgccac ctgcgcgcca acatgaccaa cgtcttcac  gtgtctctgg ccgtgtcaga ccttttcgtg gcgtgtcgtg tcatgccctg gaagcgagtc  gccgaggtgg ccggttactg gccctttgga gcgttctgag acgtctgggt ggccttcgac  atcatgtgct ccatgcctc catcctgaac ctgtgcgtca tcagcgtgga ccgctactgg  gccatctcca ggccttccg ctacaagcgc aagatgactc agcgcagtgg cttgggtcatg  gtcggcctgg catggacctt gtccatcctc atctcctca ttccgggtcca gctcaactgg  cacaggacc aggcggcctc ttggggcggg ctggacctgc caaacaacct ggccaactgg  acgccctggg aggaggactt ttggggagcc gacgtgaatg cagagaactg tgactccagc  ctgaatcgaa cctacgccat ctcttcctcg ctcatcagct tctacatccc cgttgccatc  atgatcgtga cctacacggc catctaccgc atcgcccgag tgcagatccc caggatttcc  tccctggaga gggcgcgaga gcacgcgcag agctgcgga gcagcgagc ctgcgcgccc  gacaccagcc tgcgcgcttc catcaagaag gagaccagg ttctcaagac cctgtcggtg  atcatggggg tcttcgtgtg ttgctggctg cctttctca tcttaactg catggtccct  ttctgcagtg gacacctga aggcctccg gccggcttcc cctgcgtcag tgagaccacc  ttcgacgtct tctgtgtgtt cggctgggct aactcctcac tcaaccccgat catctatgcc  ttcaacgccc actttcagaa ggtgtttgcc cagctgctgg ggtgcagcca ctctgtgctc  cgacgcggg ttggagcggg gaacatcagc aatgagctca tctctacaa ccaagacatc  gtcttcaca aggaatcgc agctgcctac atccacatga tggccaaagc cgttaccccc  ggcaaccggg aggtggacaa cgacgaggag gagggtcctt tgcgtcgcat gtccagatc </p>	Homo sapiens
99	1241	Dopamine Receptor D5	NM_000798	<p> ggcacgagggc agggctgaag ttgggacggc gcacagagccg cccctgcagt ccagcccgaa A  atgctgcgcg caggcagcaa cggcaccggc taccgggggc agttcgctct ataccagcag  ctggcgccagg ggaacgcgt ggggggctcg gggggggcac cggcactggg gccctcacag  gtggtcaccc cctgcctgct gaccctactc atcatctgga cccctgctgg caacgtgctg  gtgtgcgcag ccatcgtgcg gagccgccac ctgcgcgcca acatgaccaa cgtcttcac  gtgtctctgg ccgtgtcaga ccttttcgtg gcgtgtcgtg tcatgccctg gaagcgagtc  gccgaggtgg ccggttactg gccctttgga gcgttctgag acgtctgggt ggccttcgac  atcatgtgct ccatgcctc catcctgaac ctgtgcgtca tcagcgtgga ccgctactgg  gccatctcca ggccttccg ctacaagcgc aagatgactc agcgcagtgg cttgggtcatg  gtcggcctgg catggacctt gtccatcctc atctcctca ttccgggtcca gctcaactgg  cacaggacc aggcggcctc ttggggcggg ctggacctgc caaacaacct ggccaactgg  acgccctggg aggaggactt ttggggagcc gacgtgaatg cagagaactg tgactccagc  ctgaatcgaa cctacgccat ctcttcctcg ctcatcagct tctacatccc cgttgccatc  atgatcgtga cctacacggc catctaccgc atcgcccgag tgcagatccc caggatttcc  tccctggaga gggcgcgaga gcacgcgcag agctgcgga gcagcgagc ctgcgcgccc  gacaccagcc tgcgcgcttc catcaagaag gagaccagg ttctcaagac cctgtcggtg  atcatggggg tcttcgtgtg ttgctggctg cctttctca tcttaactg catggtccct  ttctgcagtg gacacctga aggcctccg gccggcttcc cctgcgtcag tgagaccacc  ttcgacgtct tctgtgtgtt cggctgggct aactcctcac tcaaccccgat catctatgcc  ttcaacgccc actttcagaa ggtgtttgcc cagctgctgg ggtgcagcca ctctgtgctc  cgacgcggg ttggagcggg gaacatcagc aatgagctca tctctacaa ccaagacatc  gtcttcaca aggaatcgc agctgcctac atccacatga tggccaaagc cgttaccccc  ggcaaccggg aggtggacaa cgacgaggag gagggtcctt tgcgtcgcat gtccagatc </p>	Homo sapiens

100	1241	Dopamine Receptor D5	NP_000789.1	<p>           taccagacgt cccagatgg tgaccctgtt gctgagtctg tctgggagct ggactgcgag            ggggagattt ctttagacaa aataacacct ttcaccccgga atggattcca ttaaaactgca            ttaagaaacc ccctcatgga tctgcataac cgcacagaca ctgacaagca cgcacacaca            cgcaaataca tgcctttcca gtgctgtcc ctttatcatg tgtttctgtg tagtagctcg            tgtgcttaga aacctcacc cattgattgg tagttcgaag aattggcaga atcagttgca            ataaactcag tcaaatgtac ccagcctacc agagatggac caacgacct atgagagaag            agagtatggt gctgggtcct taaaaaaaa aatgatactt ggtccttaaa aaatatgctc            tccccctcct ttttaaaaa atggcttgtt cagtcacttg tttgtgtttg aattgatttt            taaacagcag gttgtgtgtg tgtgcagtga tgtggtggga gcacagcttt cctgggtctg            gattccgtg gcttgtgtc tatgtcattt cttctctctg tctggtggg ggcctcttta            ccatagctta agaagtatcc ctgatttatt ctggtgtcta ataaacacag attatttga            aaaaaaaaa aaaaaaaaa aa         </p>	Homo sapiens
101	1242	Dopamine Receptor D2	NM_000795	<p>           VCAAIIVSRH LRANMTNVEI VSLAVSDLEF ALLVMPWKAV AEVAGYWPFG AFCDVWVAFD            IMCSTASILN LCVISVDRYW AISRPFRYKR KMTQRMALVM VGLAWTSLIL ISFIPVQLNW            HRDQAASWGG LDLPNNLANW TPWEEDFWEP DVNAENCDS LNRTYAISSS LISFYIPVAI            MIVTYTRIYR IAQVQIRRI SLERAAEHAQ SCRRAACAP DTSLRASIKK ETKVLKTLVS            IMGVFVCCWL PFFILNCMP FCSGHPGPP AGFPCVSETT FDFVFWFGWA NSSLNPVIYA            FNADFQKVEA QLLGCSHFCS RTPVETVNIS NELISYNQDI VFHKEIAAAY IHMMENAVTP            GNREVDNDEE EGPFRMFQI YQTSPPGDPV AESWELDCE GEISLDKITP FTPNGFH            agagcctggc caccagtggt ctccacgcc ctgatggatc cactgaatct gtctcgttat A            gatgatgatc tggagaggca gaactggagc cggcccttca acgggtcaga cgggaaggcg            gacagacccc actacaacta ctatgccaca ctgctcacc tgcctcatgc tgcctcgtc            ttcgggcaacg tctggtgtgt catggctgtg tcccgcgaga aggcgctgca gaccaccacc            aactacctga tctgcagcct cgcagtggtg gactcctcg tgcacacact ggtcatgccc            tgggttgtct acctggaggt ggtagtgtag tggaaattca gcaggattca ctgtgacatc            ttcgtcactc tggacgtcat gatgtgcag gcgagcatcc tgaacttgtg tgccatcagc            atcgacaggt acacagctgt ggcctatgcc atgtgtata atacgcgcta cagctccaag            cgcgggtca ccgtcatgat ctccatcgtc tgggtcctgt ccttcacct ctcccgccca            ctctcttcg gactcaataa cgcagaccag aacgagtcca tcattgcca cccggccttc            gtggtctact cctccatcgt ctcttctac gtgcccctta ttgtcacct gctggtctac            atcaagatct acattgtcct ccgcagacgc cgcaagcgag tcaacaccaa acgcagcagc            cgagctttca gggccacact gagggctcca ctaaggggca actgtactca ccccgaggac            atgaaactct gcacgttat catgaagtct aatggaggtt tcccagtgaa caggcggaga            gtggaggctg cccggcgagc ccaggagctg gagatggaga tgctctccag caccagccca            cccgagagga ccggtacag ccccatcca cccagccacc accagctgac tctcccgcag            ccgtcccacc atggtctcca cagcactccc gacagcccg ccaaaccca gaagaatggg            catgccaaag accaccccaa gattgccaag atctttgaga tccagacct gcccaatggc            aaaacccgga cctccctcaa gaccatgagc cgtaggagagc tctcccagca gaaggagaag            aaagccactc agatgtcgc cattgttctc ggcgtgttca tcatctgtg cctgcccctc            ttcatcacac acatcctgaa catacactgt gactgcaaca tccgcctgt cctgtacagc         </p>	Homo sapiens

102	1242	Dopamine Receptor D2	NP_000786.1	<p> gcttcaacgt ggctgggcta tgtcaacagc gccgtgaacc ccatcatcta caccaccttc  aacattgagt tccgcaaggc cttcctgaag atcctccact gctgactctg ctgcctgccc  gcacagcagc ctgcttccca cctccctgcc caggccggcc agcctcacc cctgcaaccg  tgagcaggaa ggcctgggtg gatcgccctc cctctcttag ccccgccagg cctgagcagt  ttcgcttggc tccatgctcc tcaatgccc caccacctca cctgcccagg gcagtgtctg  tgagctgggc atggtaccag cctggggct ggccccagct caggggcagc tcatagagtc  ccccctcca cctccagtc cctatcctt ggccaccaaa atgcagccgc cttccttgac  cttccctctg gctctaggg ttgctggagc ctgagtcagg gccagaggc tgagtttct  ctttgtggg cttggcgtg agcaggcgt ggggagagat ggcaacttca gtcctgggag  ggccacagg aggcaagcaa gctctctgc cgaggagcca gccaaagcca aaactcttag  acctatgtaa ataccagact gcaggttga cccgagagat tcccaagcca ccaactcacc  ctccctccg caccctgat tggacctcta ctttccaggc tagtccggac ccaactcacc  cgttacagc tccccaaagt gttccacat gctctgagaa gaggagccct catctgaaag  ggcccaggag ggtctatgg gagaggaa ccttggccta gccaccctg ctgcctctg  acggccctgc aatgtatccc ttctcacagc acatgctggc cagcctggg cctggcaggg  aggtcaggcc ctggaactct atctgggctt gggctaggga catcagaggt tctttgaggg  actgcctctg ccacactctg acgcaaaacc acttccctt tctattcct ctggccttc  ctctcctctg ttcccttcc cttccactgc cctgccccta gaggagccca cggctaagag  gctgctgaaa accatctggc ctggcctggc cctgccccta ggaaggagg gaagctgcag  cttgggagag cccctgggac ctgagactctg taacatcact atccgatgca ccaactaat  aaaactttga cgagtcacct tc </p>	Homo sapiens
103	1243	Dopamine Receptor D3	NM_000796	<p> taaagaaaac ggatacattc gaaagcagct atgaaacatg cactaaggctc taatagggaa A  gctggaaaaa cagcactcaa gtaatttcac cttagaggga aaaaagggtg atttctttct  gttcatttca tagttctga gtcctgagaa aggcgaagt ttgcttgctt gggatgtct  gctgtcagta aatggctgca ggagccgaag tggtaactc ctcggctctcc agaaatcaga  agaaaattt aggaagcccc ttggcatcac gcacctcct ctgggctatg gcattctctga  gtcagctgag tagccacctg aactacact gtggggcaga gaactccaca ggtgccagcc  agcccgccc acatgcctac tatgcccctt cctactgcgc gctcatcctg gccatcgtct  tcggcaatgg cctggtgtgc atggctgtgc tgaaggagcg gcccctgcag actaccacca  actacttagt agtgagcctg gctgtggcag acttgctggt gggcaccttg gtgatgccct  gggtggtata cctggagggtg acaggtggag tctggaaatt cagccgcat tgcgtgtgatg  ttttgtcac cctggatgtc atgatgtga cagccagcat cctaatctc tgtgccatca  gcatagacag gtacactgca gtggtcatgc cgttccata ccagcatggc acgggacaga </p>	Homo sapiens



104	1243	Dopamine Receptor D3	NP_000787.1	MASLSQLSSH LNYTCGAENS TGASQARPHA YYALSICALI LAIVFGNGLV CMAVLKERAL P QTTTNYLVVS LAVADLLVAT LVMPWVWYLE VTGGVWNFSR ICCDVFVILD VNMCTASILN LCAISIDRYT AVMPVHYQH GTQSSCRV ALMITAVWVL AFAVSCPLL FGNITGDPFV CSISNPDEFI YSSVSYFLP FGVTVLVYAR IYVVLKQRRR KRILTRQNSQ CNSVRPGEFPQ QTLSPDPAHL ELKRYYSICQ DTALGGPGFQ ERGELKREE KTRNSLSPTI APKLSLEVRK LSNGLRSTSL KLGPLQPRGV PLREKKATQM VAIVLGAFIV CWLPFFLTHV LNTHCQTCHV SPELYSATTW LGVNSALNP VIYTFNIEF RKAFKILSC	Homo sapiens
105	1244	Dopamine Receptor D4	NM_000797	atgggggaacc geagcacgcg ggacgcggcg gggctgctcg ctggggcgcg gccggcgcg A ggggcatctg cgggggcacg tgcggggctg tgcgggcagg ggcggcgcg gctggtgggg ggcgtgctgc tcatggcgcg ggtgctcgcg gggaactcgc tegtgtgcgt gacgtggcg accgagcgcg cctgcagacg gccaccacac tcttcatcg tgagcctggc gccgcgcgac ctctctctcg ctctctctgt gctgcgcgct tctgtctact ccgaggtcca ggtggcgcg tggtgctga gcccccgcct gtgcgacgct ctcattggcca tggacgtcat gctgtgcacc gcctccatct tcaacctgtg gcccatcagc gtggacaggt tctgtggcgt gccgtgccc ctgcgtaca accggcaggg tgggagccgc cggcagctgc tctcatcgg cgcacgtgg ctgctgtccg cggcgggtggc ggcccccgtg ctgtgcggcc tcaacgacgt gcgcggcg gaccccgccg tgtgcgcctt ggagaccgc gactacgtgg tctactcgtc cgtgtgctcc ttcttccctac cctgcccgt catgctgctg ctctactggg ccacgttccc cggcctgcag cgctgggagg tggcactcg cgccaaagctg caccggcgcg cgcggcgcg acccagcggc cctggccgcg ctccccccac gccaccgcg ccccgctcc cccaggaccg ctgcccgc gactgtgcgc ccccccgcg cggccttccc cggggtccc ggcggcccg ctgtgcgc gcgcgcgcg gctcccccc ggacccctgc ggcccgact gtgcggcccc cgcgcgcgcg ctccccagg accctgcgcg ccccgactgt gcgcccccg cgcggcgct tccccgggt ccctggcgcc ccgactgtgc gcccccgcg cccggcctcc cccaggaccg ctgcccgc gactgtgcgc ccccgcgcc cggcctccc cggaccct cccggctcca ctgtgctcc ccgacgcgc ttagagccgc cgcgtccca cccagact caccgacag ccgagagg cggcgtgcca agatcacccg ccgggagcgc aaggccatga gggctcctgc ggtggtggtc gggcccctcc tctgtgctg gacgcccctc tctgtggcg acatcacgca ggcgctgtg	Homo sapiens

106	1244	Dopamine Receptor D4	NP_000788.1	<p> cctgctgct ccgtgcccc ggggtggtc agcgccgtca cctggctggg ctacgtcaac  agcgccctca acccgtcat ctacactgtc ttcaacgccc agttccgcaa cgtctccgc  aaggccctgc gtgcctgtg ctgagccggg caccgccgga cgccccgg cctgatggcc  aggcctcagg gaccaaggag atggggagg cgcttttcta cgtaattaa acaattcct  tccc </p>	Homo sapiens
107	1267	Opioid Receptor, delta 1 (OPRD1)	NM_000911	<p> MGNRSTADAD GLLAGRGPA GASAGASAGL ACQAAALVG GVLLIGAVLA GNSLVCVSV A P  TERALQTPTN SFIVSLAAD LLLALLVLP FVYSEVQGA WLLSPRLCDA LMAMDVMLCT  ASIFNLCAIS VDRFVAVAP LRYNRQGS RQLLIGATW LLSAAVAAPV LCGLNDVRGR  DEAVCRLEDR DYVYSSVCS FFLPCFLML LYWATERGLQ RWEVARRAKL HGRAPRRPSG  PGPPSPTPPA PRLPQDPCGP DCAPPAPGLP RGCPGDCAP AAPGLPPDP GPDCAPPAPG  LPQDPCGDC APPAPGLPRG PCGPDCAAP PGLPQDPCGP DCAPPAPGLP PDPCGSNCAP  PDVRAAALP PQTTPQTRRR RRAKITGRER KAMRVLPMV GAFLLCWTFP FVWHITQALC  PACSVPPRLV SAVTWLGYV SALNPVIYTV FNAEFNRVFR KALRACC </p>	Homo sapiens

1108	1267	Opioid Receptor, delta 1 (OPRD1)	NP_000902.1	ccaggcatct ccagggaaggc ggggcttcaa ccttgagaca gcttcgggtt ctaacttgga gccggacttt cggagttggg gggctccgggg ccc AVGLGNVLV MFGIVRYTKM KTATNIYFN LALADALATS TLPFQSAKYL METWPFGELL CKAVLSIDYY NMFTSIFTLT MMSVDRIYAV CHPVKALDFR TPAKAKLINI CIWVLASGVG VPIMVNAVTR PRDGAVVCML QFPSPSWYWD TVTKICVFLE AFVVPILIIIT VCYGLMLLRL RSVRLLSGSK EKDRSLRRIT RMVLVVUGAF VVCWAPIHIF VIVWTLVDID RRDPLVVAAL HLCIALGYAN SSLNPVLYAF LDENFKRCFR QLCKRKPCGRP DPSSFRRPRE ATARERTAC TPSDGPGGGR AA	Homo sapiens
1109	1424	Duffy Antigen	NM_002036	gggectgaac caaacggtgc catggggaac tgtctgcaca gggtagtat gggggcaggc A cccagagtcc cttatcccta tgcccctcat ttcccctgct gtttgcccct cagtctttat atctcttctt ttctctctc atcttttctt ccttcccgtt ttttctctt tccittcaaaag tctttttctt tctctcttc ctatgctagc ctcttagctt cctcttggtt cctccctttt gcctttgagt cagttccatc ctggtctctt ggtgcctttc cttctgacct tgcactgctc ctccagcccc agctgccctg gcttcccacg gactgttctt gctccggctt ttcaggctcc ctgctttgtc cttttccact gtccgcactg catctgactc ctgcagagac cttgttcttc caccgacct tctctctgt cctcccctc cactgcccc tcaattccca ggagactctt ccggtgtaac tctgatggcc tctctgggtt atgtctcca ggcggagctc tccccctcaa ctgagaactc aagtcagctg gacttcgaag atgtatggaa ttcttctat ggtgtgaatg attccttccc agatggagac tatgatgcca acctggaagc agctgcccc tgcactcct gtaacctgct ggatgactct gcactgacct tcttcatctt caccagtgtc ctgggtatcc tagctagcag cactgtctc ttcagtctt tcaagacctt ctccgctgg cagctctgcc ctggctggcc tgtcctggca cagctggctg tgggcagctg cctcttcagc attgtggtgc ccgtcttggc cccagggcta gtagcactc gcagctctgc cctgtgtagc ctgggctact gtgtctgcta tggctcagcc tttgcccagg ctttgcctgct aggttgacct gctccctgg gccacagact gggtgcaggc caggtccacg gctcaccct ggggtcact gtgggaattt ggggagtggc tgccctactg acaactgctg tcaacctggc cagtgtgtct tctggtggac tctgcacct gatatacagc acggagctga aggtcttggca ggccacacac actgtagcct gtcttgccat ctttgcctg ttgccattgg gttgttttgg agccaaagggg ctgaagaagg cattgggtat ggggccaggc ccttgatga atactcctgt ggcctgggtt atttctgggt ggcctcatgg ggtggttcta ggaactgatt tcttggtgag gtccaaagctg ttgctgtgtg caacatgtct gggccagcag gctctggacc tgcctgtgaa cctggcagaa gccctggcaa ttttgcactg tgtggctacg cccctgctcc tgcctctatt ctgccaccag gccaccgca ccctcttggc ctctctgccc ctccctgaag gatggcttc tcatctggac accttgga gcaaatccta gttctcttcc cactgtcaa cctgaattaa agtctacact gcctttgtg	Homo sapiens
1110	1424	Duffy Antigen	NP_002027.1	DSALPFFILT SVLGILASST VLFMLFRPLF RWQLCPGWPV LAQLAVGSAL FSIVVPVLAP GLGSTRSSAL CSLGYCVWYG SAFAQALLLG CHASLGHRIAG AGQVPGLTLG LTVGIWVAA LLTLPVTLAS GASGGLCTLI YSTELKALQA THTVACIAIF VLLPLGLFGA KGLKKALGMG PGPWNILWA WFIFWPHGV VLGLDFLVR KLLLLSTCLA QQALDLLLNL AEALAILHCV ATPLLLALFC HOATRTLLPS LPLPEGWSSH LDTLGSKS	Homo sapiens

111	1451	EBV-Induced Gene 2	NM_004951	ggaattccct gatatacacc tggaccacca ccaatgggata tacaatggc aaacaatttt A actccgccct ctgcaactcc tcagggaat gactgtgacc tctatgcaca tcacagcacg gccaggatag taatgcctct gcattacagc ctgctcttca tcattgggct cgtgggaaac ttactagcct tggctgctcat tgttcaaac aggaataaac tcaactctac caccctctat tcaacaaatt tggatgattc tgatatact ttaccacccg cttgcctac acgaatagcc tactatgcaa tgggctttga ctggagaatc ggaatgacct tgttaggat aactgcgcta gtgttttaca tcaacacata tgcaggtgtg aactttatga ctgacctgag tattgcgcg ttcattgctg tggcgacccc tctacgctac aacaagataa aaaggattga acatgcaaaa ggcgtgtgca tatttgtctg gattctagta ttgtctcaga cactccact cctcatcaac cctatgtcaa agcaggaggc tgaaggatt acatgcatgg agtatccaa ctttgaagaa actaaatctc ttccctggat tctgcttgg gcatgtttca taggatagt acttccact ataatcattc tcatctgcta ttctcagatc tctgcaaac tcttcagaac tgccaaacaa aaccactca ctgagaaatc tgggtgaaac aaaaaggctc tcaacacaaat tattcttatt attgttgtgt ttgttctctg ttccacacct taccatgttg caattattca acatatgatt aagaagcttc gtttctctaa ttctctggaa ttagccttgc gatattcgtt ccagatttct ctgcacttta cagtatgcct gatgaacttc aattgctgca tggacccttt tatctacttc tttgcattga aagggtataa gagaaaggtt atgaggatgc tgaacggca agtcagtga tcgatttcta gtgctgtgaa gtcagccct gaagaaaat cactgaaaat gacgaaaacg cagatgatga tacattccaa gtcttcaaat ggaagtgaat atggtattga ttttggttta tagtgacgta aactgtatga caaactttgc aggaactccc ttataaagca aaataattgt tcagcttcca attagtatc ttttatatt cttcattgg gcactttccc atctccaaact cggaagtaag ccaagagaa caacataaag caacacacat aaagcacaat aaaaatgcaa ataaatattt tcatctttat ttgtaaacga atacacaaa aggagcgct cttataaact cccaatgtaa aaagttttgt tttaataaaa aatttaatta ttatttcttg ccaacaaaatg gctagaaaag actgaataga ttatatattg ccagatgta atactgtaac atacttttta ataacacatat ttcttaaatc caaatttctc tcaatgttag atttaattcc ctcaataaca ccaatgtttt gtttgtttc gtctgggtc ataaaacttt gtaagggaac tcttttgaa taaagagcag gatgctgc	Homo sapiens
112	1451	EBV-Induced Gene 2	NP_004942.1	MDIQMANNFT PSATPQND CDLYAHSTA RIVMPLHYSL VFIIGLVGNL LALVIVQNR P KKINSTTLYS TNLVTSIDLF TALPTRIAY YAMGFWRIG DALCRITALV FYINTYAGVN FMTCLSIDRF IAVVHPLRYN KIKRIEHAKG VCIFWILVF AQTLP LLINP MSKQEAERIT CMEYPNFEET KSLPWLIGA CFIGYVLP LI ILICYSQIC CKLFRTAKQN PLTEKSGVVK KALNTIILII VVFLCFTPY HVAI IQHMIK KLRFSNFLEC SQHRSFOISL HFTVCLMNFN CCMDPFIYFF ACKGYKRKVM RMLKRQVSVS ISSAVKSAPE ENSREMTETQ MMIHSKSSNG K	Homo sapiens
113	1486	Endothelin B Receptor	NM_000115	gagacattcc ggtggggggac tctggccagc ccgagcaacg tggatcctga gagcactccc A aggtaggcat ttgcccgggt gggacgcctt gccagagcag tgtgtggcag gccccgtgg aggatcaaca cagtggctga acactggaa ggaactggtta cttggagtct ggacatctga aacttggtc tgaactgcg cagcggccac cggacgcctt ctggagcagg tagcagcatg cagccgctc caagtctgtg cggacgcgc ctggttgcgc tggttcttgc ctgcccgtg tcgcggtatc tgggagagga gagaggcttc cgcctgaca gggccactcc gcttttgaa	Homo sapiens

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114	1486	Endothelin B NP_000106.1 Receptor	acatggtgct tttctttcat ctagagggaa aactgctttt tgagaccga agaacctctt agctttgtgc gttctgcct aatttttata tcttctaagc aaagtgcctt aggatagctt gggatgagat gtgtgtgaaa gtatgtacaa gagaaaacgg aagagagagg aaatgaggtg gggttgagg aaacctatgg ggacagattc ccattcttag cctaacgttc gtcatgacct cgtcacatca atgcaaaaagg tcctgatttt gtccagcaa aacacagtc aatgttctca gagtgaactt cgaataaaat tgggcccaag agcttaact cggctctaaa atatgcccaa attttactt tgttttctt ttaataggct gggccacatg ttggaaataa gctagtaatg ttgtttctg tcaatattga atgtgatggt acagataaac aaacccaaac aatgtggcca gaaagaaaaga gcaataataa ttaattcaca caccatattg attctattta taaatcacc acaaactgt tcttaattt catcccaatc acttttccag aggcctgta tcatagaagt catttagac tctcaattt aaattaattt tgaatcacta atattttcac agttatttaa tatattaat tctatttaa attttagatt attttatta ccatgtactg aattttaca tctgatacc cttctctct ccatgtcagt atcatgttct ctaattatct tgccaaattt tgaactaca cacaaaaagc atacttgcat tattataat aaaattgcat tcatgtgctt tttaaaaaa atgtttgatt caaaacttta acatactgat aagtaagaaa caattataat ttctttacat actcaaaaacc aagatagaaa aaggtgctat cgttcaactt caaaacatgt ttcctagat taaggacttt aatatagcaa cagacaaaat tattgttaac atggatgta cagctcaaaa gattataaa agattttaac ctattttct cctattatc cactgcta gtgatgtat gttcaaacac cttttagat. tgatagctta catatggcca aaggaataca gtttataga aaacatgggt atgctgtagc taacttata aaagtgtaat ataacaatgt aaaaaattat atactggga gattttttg gtgcccataa gtggctatag ttaactgattt tttattatgt aagcaaaaacc aataaaaatt taagttttt taacaactac cttatttttc actgtacaga cactaattca ttaataacta atgtatgtt taaaagaaa ataaatgtga caagtggaca ttattatgt taaatataca attataagc aagatgaag ttattcaatt aaaaagccac attctggtc tctggg	1487	Endothelin B NP_000106.1 Receptor	SLARSLAPAE VPKGDRTAGS PPRISPPC QGPIEKETF KYINTWVSL VFVLGIIGNS TLRLIYKKNK CMRNGPNILI ASLALGDLH IVIDIPINVY KLLAEDWPFV AEMCKLVPFI QKASVGITVL SLCALSIDRY RAVASWSRIK GIGVPKWTAV EIVLIWVSV VLAVPEAIGF DIITMDYKGS YLRICLLHPV QKTAQMIFYK TAKDWWLESF YFCLPLAITA FFYTLMTCEM LRKSGMQIA LNDHLKQRR VAKTVFCLVL VFALCWLPPLH LSRILKLTLY QNDPNRCEL LSFLLVLDYI GINMASINSC INPIALYLV KRFKNCFKSC LCCWCQSFEE KQSLEEKQSC LKFKANDHGY DNFSSNKYS SS	1488	Endothelin A NM_001957 Receptor	gaattcgcg cgcgctcttg cggctccaga gtggagtga aggtctggag ctttgggagg A agacggggag gacagactgg agcggtgttc ctcggaggt tctttttcgc tgcgagacct cgcgcgcgcg tacagtcac cgcgtggtct gacgattgtg gagagcggtt ggagaggtt catccatccc acccgctcgt cgcgggggat tggggtccca gcgacacctc cccgggagaa gcagtgcga ggaagtctt cgaagccggg gaagctgtc agccgaagcc gccgccgcgc cggagcccg gacacggcc accctccgc caccaccac tgcctttctc cggcttctc tggccaggc gccgcggga cccggcagct gtctgcgcac gccgagctcc acggtgaaaa aaaaagtga ggtgtaaaag cagcacaagt gcaataagag atatttctc aaatttgcct	Homo sapiens	Homo sapiens
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116	1488	Endothelin A NP_001948.1	Receptor	<p>           MET1CLRASF WLAIVGCVIS DNPERYSTNL SNHVDFTTF RGTELSFLVT THQPTNLVLP P            SNGSMHNYCP QOTKITSAFK YINTVISCTI FIVGMVGNAT LLRIYQNK MRNGPNALIA sapiens            SLALGLIYV VIDLPINVK LLAGRWPFDH NDFGVFLCKL PFPLQKSSVG ITVLNLCALS            VDRYRAVAS SRVQGIGIPL VTAIEIVSIW ILSFILAIPE AIGFVMVFFE YRGEQHKTCM            LNATSKFMEF YQDVKDWLWF GFYFCMPLVC TAIFYTLMT C EMLNRRNGSL RIALSEHLKQ            RREVAKTVFC LVVIFALCWF PLHLSRLKK TVYNEMDKNR CELLSFLLIM DYIGINLATM            NSCINPIALY FVSKKFKNCF QSCLCGCCYQ SKSLMTSVPM NGTSIQWKNH DQNNHNTDRS            SHKDSMN         </p>	Homo sapiens
117	1598	Calcium-Sensing Receptor (CASR)	NM_000388	<p>           caacaggcac ctggctgcag ccaggaagga ccgcaagccc ttctgcgcag gagagtggaa A            ggaggagct gtttgccagc accgaggtct tgcggcacag gcaacgcttg acctgagtct            tgcagaaatga aaggcatcac aggagccctc tgcattgatgt ggcttccaaa gactcaagga            ccaccacat tacaagtctg gattgaggaa ggcagaaatg gagattcaaa caccacgtct            tctattattt tattaatcaa tctgtagaca tgtgtcccca ctgcaggag tgaactgctc            caaggagaa acttctggga gctccaaac tctcagctgt ctcacccctt gccctggaga            gacggcagaa ccatggcatt ttatagctgc tgcgtgggtcc tcttggcact cacttggcac            acctctgctt acgggccaga ccagcgagcc caaagaagg gggacattat ccttggggggg            ctctttccta ttcatatttg agtagcagct aaagatcaag atctcaaatc aagcccgag            tctgtggaat gtatcaggtta taattccgt ggggttcgct ggttacaggc tatgatattt            gccatagagg agataaacag cagcccgacc ctctctcca acttgacgct ggatacagg            atatttgaca ctgcaaacac cgtttctaag gccttgaag ccaccctgag ttttgttgc            caaaacaaa ttgattcttt gaaccttgat gacttctga actgctcaga gcacattccc         </p>	Homo sapiens



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ggggagccca cctgtgctt tgagtgtg caagtgcga gatgacttct ggtccaatga gaaccacac  
acagatgcca gtgcctgtaa caagtgcga gatgacttct ggtccaatga gaaccacac  
tctgcattg ccaaggagat cgagtttctg tctgtgacgg agcccttgg gatcgactc  
accctcttg ccgtgctggg catttctctg acagccttgg tgctgggtg gtttatcaag  
ttccgcaaca caccattgt caaggccacc aacgagagac tctctacct cctcctctc  
tccctgctct gctgcttct cagctccctg ttcttcatcg gggagccca ggactggagc  
tgccgcctgc gccagccggc ctttggcatc agcttctgct tctgcatctc atgcatcctg  
tgaaaaacca accgtgtcct cctggtgttt gaggcagaag tccccaccg ctccaccgc  
agtggtggg ggtcaacct gcagttcctg ctggttttcc tctgacatt catgcagatt  
gtcatctgt tgatctggct ctacacggc cccctcaa gctaccgcaa ccaggagctg  
gagatgaga tcatcttcat cactgcccac gaggtctccc tcatggcct gggttctctg  
atcggtaca cctgctgct cctgcccac ggctgcccac tctcttct tctccggaag  
ctgccggaga acttcaatga agccaagttc atcacctca gcatgctcat ctcttctc  
gtctggatct ccttcattcc agcctatgcc agcactatg gcaagtttgt ctctgctga  
gagtgattg ccactctggc agccagcttt ggcttctg gctgcatctt ctccaacaag  
atctacatca ttctcttcaa gccatcccc aacaccatcg aggaggtgct ttgcagcacc  
gcagctcac ctttcaaggt ggctgcccgg gccacgtgc gccgcagcaa cgtctccgc  
aagcgtcca gcagccttg aggtccacg ggatccacc cctcctctc catcagcagc  
aagagcaaca gcgaagacc attcccacg ccgagaggc agaagcagca gcagcgtg  
gccctaacc agcaagagca gcagcagcag ccctgacc cccacagca gcaacgatct

118	1598	Calcium-Sensing Receptor (CASR)	NP_000379.1	MAFYSCCWVL LALTWHTSAY GPDQRAQKKG DIILGGLFPI HFGVAAKDQD LKSRPESVEC P	Homo sapiens
				IRYNFRGFRW LQAMIFAIEE INSSPALLPN LTLGYRIFDT CNTVSKALEA TLSFVAQNKI	
				DSLNLDFCN CSEHIPSTIA VVGATGSGVS TAVANLLGLF YIPQVSYASS SRLLSNKNQF	
				KSFLRTIPND EHQATAMADI IEYFRWNWVG TIAADDDYGR PGIEKFREEA EERDICIIDS	
				ELISQYSDEE EIQHVEVEVIQ NSTAKVIVVF SSGPDLEPLI KEIVRRNITG KIWLASEAWA	
				SSSLIAMPQY FHVVGGTIGF ALKAGQIPGF REFLLKVHPR KSVHNGFAKE FWEETFNCHL	
				QEGAKGPLV DTFLRGHEES GDRFSNSSTA FRPLCTGDN ISSVETPYID YTHLRISYNV	
				YLAVYSIAHA LQDIYTCPLG RGLFTNGSCA DIKKVEAWQV LKHLRHLNFT NNMGEQVTFD	
				ECGDLVGNYS IINWHLSPED GSIVFEKVG YNVYAKKGER LFINEEKILW SGFSREVPFS	
				NCSRDCLAGT RKGLIEGEPT CCFECEVECPD GEYSDETDAS ACNKCDDDFW SNENHTSCIA	
				KEIEFLSWTE PFGIALTLEA VLGIFLTAFV LGVFTKFRNT PIVKATNREL SYLLLFSLLC	
				CFSSSLFFIG EPQDWTCLRL QPAFGISFVL CISCILVKTN RVLLVFEAKI PTSFHRKMWG	
				LNLOFLLVFL CTFMQIVICV IWLYTAPPS YRNOELEDI IFITCHEGSL MALGFLIGYT	
				CLLAACIFFF AFKSRKLPEN FNEAKFITFS MLIFFIIVWIS FIPAYASTYG KFVSAVEVIA	
				ILAAAFGLLA CIFENKIYII LFKPSRNTIE EVRCSTAHA FKVAARATLR RSNVSRKRSS	
				SLGGSTGSTP SSSISSKSNS EDPFPQPERQ KQQQLALTQ QEQQQQLTL PQQQRSSQQP	
				RCKQKVI FGS GTVTFSLSFQ EPQKNAMAHG NSTHONSLEA QKSSDTLTRH QPLLPLQCGE	
				TDLDLTVQET GLQGPVGGDQ RPEVEDPEEL SPALVVSSSQ SFVISGGGT VTNVNVNS	
119	1676	Formyl Peptide Receptor-Like Receptor	NM_001462	ggcacgagga acaactatt tgcaaaagttg gcgcaaaacat tctgtcctga caggaccatg A	Homo sapiens
				gacacaggtt gtagagatag agatggctct gctgtgcat tcagcagatt ctgtagatag	
				aattaatagg acttgatgg gattgtggtg agagaaagtg aaatgaaaga taagtcttag	
				tttggaagtt ttaacaactg aatgtttaa ctcaaataga cacaaaatat tggaagagtg	
				gcaggtttgg gaggatgaga caatcaactg tttggttgag ccacgttagg ttgaaatgt	
				ctacggggtc ccgtggggag aggttatatc agactggagc accagagaga ggccaaaggct	
				gatagttttag atgaaaaagag agcatgatat ttttaagccct gagactggat aatatcacct	
				atagaaaagac tatatagaga taagagaggt gggaacaag taaaagctgc gggacactcc	
				taaatttaga gtcaaattta gacagaaaaa tactagcaaa ggggactgaa aagcgggtggc	
				caattgagct tcaaatgcaa gtgaaagtgt gttgtgtgta cattatcat ctcatggcac	
				aggaaaaacg tgatttaagg agaaggaagc gatccaatgg gaagaagaga tccaatggat	
				cctctatcac gaagatattg agataagaac caatatggat ttgcacccac tgcatttgca	
				gccttgaggt cataagcatc ctcaggaaaa tgcaccaggt gctgctggca agatggaaac	

120	1676	Formyl Peptide Receptor- Like Receptor	NP_001453.1	caactttctc actcctctga atgaatatga agaagtgtcc tatgagtctg ctggctaac tggtctgagg atcctcccat tgggtgtgct tggggtcacc ttgtctctg ggtcctggg caatgggctt gtgatctggg tggctggatt ccggatgaca cgcacagtea ccaccatctg ttacctgaac ctggccctgg ctgacttttc ttccacggcc acattaccat tccctattgt ctccatggcc atgggagaaa aatggccttt tggctgggtc ctgtgtaagt taattcacat cgtggtggac atcaacctct ttggaagtgt ttctcttgatt ggtttcattg cactggaccg ctgcatttgt gtccctgcac cagtctggc ccagaaccac cgcactgtga gctggccat gaagtgatc gtgggacctt ggattcttg tctagtctt acctggccag ttttctctt tttgactaca gtaactattc caaatggga cacatactgt acctcaact ttgcatcctg gggtggcacc cctgaggaga ggctgaagg ggcattacc atgtgacag ccagaggat tatccggttt gtcattggct ttagcttgcc gatgtccatt gttgccatct gctatggct cattgcagcc aagatccaca aaagggcac gataaatcc agcgtccct tacgggtcct cactgctgtg tgggttctt tcttcactg ttggtttccc ttccaactgg ttgcccctt gggcaccgtc tggctcaaa agatgttgtt ctatggcaag tacaataca ttgacatcct ggttaaccca acgagctccc tggccttctt caacagctgc ctcaaccca tgccttacgt ctttgtggc caagacttcc gagagagact gatccactcc ctgccacca gctcggagag ggccctgtct gaggactcag cccaactaa tgacacggct gccaatctg ctccactcc tgacagact gagttacagg caatgtgagg atgggttcag ggatattttg agttctgtt atctaccct aatgccagt ccagcttcat ctaccctga gtcattattga ggcattcaag gatgcacagc tcaagtattt attcaggaaa aatgctttt tgcctctgat ttggggctaa gaaatagaca gtcaggctac taaaatatta gtgtatttt ttgtttttg acttctgct ataccctgg gtaagtggag ttgggaaata caagaagaga aagaccagt gggatttga agacttagat gagatagcgc ataataagg gaagacttta aagataaaag taaaatgttt gctgtagggt ttttatagct attaaaaaaa atcagattat ggaagttttc tctattttt agtttgctaa ggttttctg tttcttttc ttacatcatg agtgacctt gcattttatc aaatgcattt tctacatgta ttaagatggt catattattc tcttctttt atgtaaatca ttataataa tgttcattaa gttctgaatg ttaaaactact cttgaattcc tggaataaac cacacttagt cctgatgtac tttaaatatt tatactcac aggagtgtgt tagaatttct gtgtttatgt ttatatactg ttatttcaat ttttctacta tcttgctaa gtttcatag aaaaaagga acaagagaa acttgtaatg gtctctgaaa aggaattgag aagtaattcc tctgattctg tttctggtg ttatatctt attaatatt cagaaaaatt c TICYLNALA DFSFATLPF LIVSMANGKEK WPFGWFLCKL IHIWVDINLF GSVFLIGFIA LDRICVLHP VMAQNHRTVS LAMKVIVGPW IALVLTLPV FLFLTVTIP NGDYCTFNE ASWGGTPEER LKVAITMLTA RGIIRFVIGF SLPMSIVAIC YGLIAAKIHK KGMIKSSRPL RVLTAVASF FICWFPPQLV ALLGTWLKE MLFYGYKII DIIVNPTSSI AFFNSCLNPM LYFVVGQDFR ERLIHSPTS LERALSEDA PTNDTAANSA SPPAETELQA M	Homo sapiens
121	1681	Follicle Stimulating Hormone Receptor	NM_000145	cgctgagatc tgtggagggt tttctctgca aatgcagaaa gaaatcagggt ggatggatgc A ataattatgg cctgtctctt ggtctctttg ctggcattcc tgagcttggg ctccaggatgt catcatcgga tctgtcactg ctctaacagg gtttttctct gccaagagag caaggtgaca gagattcctt ctgacctccc gaggaatgcc attgaactga ggtttgtcct caccaagctt	Homo sapiens

122	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	<p> cagatcatcc aaaaagggtgc attttcaggga ttctgggggacc tggagaaaaat agagatctct  cagaatgatg tcttgagggt gatagaggca gatgtgttct ccaaccttcc caaattacat  gaaattagaa ttgaaaaggc caacaacctg cttacatca cccctgaggc cttccagAAC  cttcccaacc ttcaatatct gtaatatctt aacagagta taaagcacct tccagatgtt  cacaagattc attctctcca aaagggtttta cttgacattc agataaacat aaacatccac  acaattgaaa gaaattcttt cgtggggctg agctttgaaa gtgtgattct atggctgaat  aagaatggga ttcaagaaat acacaactgt gcattcaatg gaacccaact agatgcagt  aatctaagcg ataataataa tttagaagaa ttgctaattg atgtttcca cggagcctct  ggaccagtca ttctagatat ttcaagaaca aggtaccatt cctgcctag ctatggctta  gaaaatctta agaagctgag ggccaggtcg acttacaact taaaaagct gcctactctg  gaaaagcttg tcgcccctcat ggaagccagc ctacacctc ccagccattg ctgtgccttt  gcaaaactgga gacggcaaat ctctgagctt catccaattt gcaacaaatc tattttaagg  caagaagtig attatatgac tcagggtagg ggtcagagat cctctctggc agaagacaat  gagtcagct acagcagagg atttgacatg acgtacactg agtttgacta tgacttatgc  aatgaagtgg ttgacgtgac ctgctccctt aagccagatg cattcaacct atgtgaagat  atcatggggg acaacatcct cagagtccct atatgggtta tcagcatcct ggccatcact  gggaacatca tagtgctagt gatcctaact accagccaat taaactcac agtccccagg  ttccttatgt gcaacctggc ctttgctgat ctctgcaact gaatctacct gctgctcatt  gcatcagttg atatccatc caagagccaa tatecaact atgccattga ctggcaaaact  ggggcaggct gtgatgctgc tggcttttct actgtctttg ccagtgaagt gtcagtctac  actctgacag ctatcacctt ggaaagatgg cataccatca cgcattgccat gcagctggac  tgcaaggtgc agtcccgcca tgcgtccagt gtcattggtga tgggctggat ttttgccttt  gcagctgccc tctttcccat ctttggcacc agcagctaca tgaagggtgag catctgcctg  cccatggata ttgacagccc ttgtgcacag ctgtatgtca tgtccctcct tgtgtcctaat  gtcctggcct ttgtggtcat ctgtggctgc tatatccaca tctacctcac agtgcggaac  cccaacatcg tgcctcctc tagtgacacc aggtatgcca agcgcattggc catgctcctc  ttcactgact tctctgcat ggcacccatt tcttctttg ccatttctgc ctccctcaag  gtgcccctca tcaatgtgtc caaagcaaaag attctgctgg ttctgtttca ccccatcaac  tctgtgcca acccttctct ctatgccatc tttaacaaaa acttttcgag agatttcttc  attctgctga gcaagtgtgg ctgctatgaa atgcaagccc aaatttatag gacagaaaact  tcattccactg tccacaacac ccattccaag aatggccact gctcttcagc tcccagagtc  accagtgtgt ccaattacat actgttccct ctaagtcat tagcccaaaa ctaaaaacaca  atgtgaaaat gtatctgagt atggaatgat aattcagtcc ttgcttttga aggtatgtc  acaaggagct gacagtgtct ctacacattt catctaattt aaatttcttg gcataccttt  aaggtaaaatt ggtcagggaac tattaattcc atgtatata ttaggaagct gaattattag  taacaacaat aataataaa gaatgcaata ctgtaaaaaa gggcgccga att  </p>	Homo sapiens
122	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	<p> MALLLVSLA FLSIGSGCHH RICHCSNRVF LCQESKVEI PSDLPNAIE LRFVLTKLRV P  IQKGFSGFG DEKIEISQN DVLEVIADV FSNLPKLHEI RIEKANNLLY ITPEAFQNL P  NLQYLLISNT GKHLPDVHK IHSLOKVLDD IQDNNIHTI ERNSFVGLSF ESVILWLNKN  GIQEIHNCAF NGTQLDAVNL SDNNNLEELP NDVFHCSGP VILDISRTI HSLPSYGLE N  LKKLRARSTY NLKLIPTLEK LVALMEASLT YPSHCCAFAN WRRQISELHP ICNKSILRQE </p>	

123	1726	G Protein- Coupled Receptor RDC1	U67784	<p>VDYMTQARGQ RSSLAEDNES SYSRGDMTY TEFDYDLCNE VDVTCSPKP DAFNPCEMIM  GYNILRVLIW FISILAITGN IIVLVILTS QYKLTVPREFL MCNLAFAADLC IGIYLLIAS  VDIHTKSQYH NYAIDWQTGA GCDAAGFFTV FASELSVYTL TAITLERWHT ITHAMQLDCK  VQLRHAASVM VMGWIFAFAA ALFPIFGISS YMKVSIICLPM DIDSPLSQLY VMSLLVLNVL  AFVVICGCYI HIYLTVRNPV IVSSSDTRI AKRMAMLIPT DFLCMAPISE FAISASLKVP  LITVSKAKIL LVLFHPINSC ANPFLYAIPT KNFRDRFFIL LSKCGCYEMQ AQIYRTETSS  TVNTHPRNG HCSSAPRVTS GSTYILVPLS HLAQN</p> <p>gccaatccg tgggtgctg ggtgaatc caggccaaga ccacaggcta tgacacgcac A  tgctacatct tgaacctggc cattgccgac ctgtggggttg tcctcaccat ccagctctgg  gtggtcagtc tctgacagca caaccagtg gccatggcg agctcacgtg caaagtcaca  cacctcatct tctccatcaa cctcttcagc agcattttct tcctcacgtg catgagcgtg  gaccgtacc tctccatcac ctacttcacc aacaccccca gcagcaggaa gaagatggta  cgccgtgtcg tctgcatact ggtgtgctg ctggccttct gctgtctct gctgacacc  tactaccta agaccgtcac gctgcgtcc aacaatgaga cctactgcc gtccttctac  cccgagcaca gcatcaagga gtggtgctg gccatggagc tggctcctgt tgccttgagg  tttgccgttc ccttctccat tctcgtctg tctacttcc tctgggccag agccatctcg  gcgtccagtg accagagaaa gcacagcagc cggaagatca tcttctccta cgtggtggtc  tctctgtct gctggttgc ctaccacgtg gcggtgctg tggacatctt ctccatctg  cactacatcc ctttccacctg ccggtggtg cagcgcctct tcacggccct gcattgcaca  cagtccctgt cgctggtgca ctgctgcgtc aacctgtctc tctacagctt catcaatcgc  aactacaggt acgagctgat gaaggccttc atctcaagt tctcgccaa aacagggtc  accaagctca tcatgcttc cagagctc cagagctc gagggtctg gaggcagc  accaaatgat ctgccctgga gaggctctg gagggttga cttgttttg aacagggtga  tggccctat ggtttctag agcaaaagca agtagcttg ggtcttgatg cttgagtaga  gtgaagagg gagcacgtgc cccctgcatc cattytctct tctcttgat gacgcagctg  tcatttggt gtgctgctg acagtttgc aacaggcaga gctgtgctgc acagcagtcg  tgtgcgtcag agccagctga ggcagagctt gcctggactt ctgtaagata ggattttctg  tgttctctga atttttata tgggtgattg tattaaatt ttaagacttt atttctcac  tattggtga ccttataaat gtatttgaaa gttataata ttttaaatat tgtttgggag  gcatagtgct gacataatatt cagagtggtg tagttttaag gttagcgtga ctttcagttt  tgactaaagga tgacataatatt tgttagctgt tttgaaataa tatatatata aatatataa  tatatgccag tcttggtgca aatgttttat ttaccatagt tttatatctg tgggtgtgtt  tgtaccggca cgggatatgg aacgaaaact gctttagaat gcagtttgtg acattaatag  tattgtaaaag ttacatttta aataaaca aaaaactgtc tggactgcaa atctgcacac  acaacgaaca gttgcatctc agagagttct ctcaattgt aagttatttt tttttaataa  agatttttgt tctctaaaaa aaaaaaaaaa aaaaaa</p> <p>MDLHLFDYAE PGNFSDISWP CNSSDCIVVD TVMCPNPNK SVLLYTLSEI YIFIFVIGMI P  ANSVVWVNI QAKTGYDTH CYILNLAIAD LMWVLTIPVW VVSLVQHNQW PMGELTCKVT  HLIFSINLFS GIFTLCMSV DRYLSITYFT NTPSSRKKMW RRWCILVWL LAFCVSLPDT  YYLKTVTAS NNETYCRSFY PEHSIKEWLI GMELVSIVLG FAVPFSIIAV FYFLIARAI  ASSDQEKHSS RKIIFSIVW FLVCWLPYHV AVLLDIFSIL HYIPFCTCLE HALFTALHVT</p>	Homo sapiens
124	1726	G Protein- Coupled Receptor RDC1	AAA62370.1		Homo sapiens

125	1762	Galanin Receptor GalR1	NM_001480	QCLSLVHCCV NPVLYSFNIR NYRYELMKAF IFKYSAKTGL TKLIDASRVS ETEYSALEQN AK	Homo sapiens
				atcccgctag aatccgtcca gtctctgtct gcgcaccgtg acttctaagg ggcgcggatt A tcagccgagc tgttttcgcc tctcagttgc agcagagaag cccctggcac ccgactctat ccaccaccag gaagcctccc aaaagagctc tgcctctgtg gacgactcgg aatccctgga aaagccggga gggagtcgga ggcgccagcc cactggggag gtggcgctgg gcgcgcggga tgccgcggga gctttctctg caggagccgc acagtgcct gtgcgcct ggcagtgccg gggaagcgc gcgggaagga gcggctccga gcaacaggtg cagcacgcag ccgctccggg agccaggga aacgcgcggc gaagatctgg agcgtaag gggagagaag ggtctttcca cctgcgcggc tgagccggc ggatccctct tccaggtctc cgtggtcgcg cagcggggcg aggcgccgg gcaggggacc ccagtgtctc cgagatcacc gtcccttccc gagaaggtcc agctccgggc tccgaaacc accctctctc agaaggtcgc ggcgcaaga cggtgccacc aggcacggc accggatccc cgtcccgct ggctcgcgc tggggggaag ctacagactcc taaacctgca ctctccgtgc ttgcgccgg gaccctggc caccctggc gcctgctatc ccgcccctcc tcccgcgcg ccccgccgt cgcgggaca gcccgcggg ccatggagct ggcggtcgg aacctcagc agggcaacgc gagctggccg gagcccccg ccccgagcc cgggcccgtg ttccggcatcg gcgtggagaa ctctgtacg ctgggtgtgt tggcctgat cttcgcgtg ggcgtgctgg gcaacagcct agtgatcac cgtgtggcg gcagcaagcc gggcaagccg cggagcacca caaacctgt catctcaac ctgagcatcg ccgacctggc ctacctgtc ttctgatcc ccttcaggc caccgtgtac gcgtgccc cctgggtgtc ggcgccctc atctgaagt tcaccacta cttcttacc gtgtccatgc tggtagagcat cttcacctg gcgggatgt ccgtggaccg ctactggcc atcgtgcact cgcggcgctc ctctccctc aggtgttccc gcaacgcgt gctgggggtg gctgtcatct ggcgcgtgtc cattgccatg gcctgcgcc tggcctacca ccagggcctc ttccaccgc gcgccagcaa ccagacctc tgcgtggagc agtgccccga cctcgccc cctgagcct acgtgtgtg caccttctc ttccggtacc tgcgtccgt cctgtctac tgcttctgt atgccaaagt ccttaatcac ttgcataaa agttgaagaa catgtcaaa agtctgaag catccaagaa aaagactgca cagacagttc tgggtgtgtg tgtgtgtgtt ggaatctcct ggctgccga ccacatcat catctctgg ctgagtttgg agttttccc ctgacgcgg cttccttctc cttcagaatc accgccact gcctggcgt cagcaattcc tccgtgaatc ctatcattta tgcatcttc tctgaaaatt tcaggaaagg atactaaa gataaaagt cgaatagaca cccaccatc caaagattca cactgagt atactaaa gataaaagt aatataaa gttgtcaagt gtacattcg aaccaattgt actcatgtg gataaaagt agagtatcct tatggttgag ttccatata agtgaccag acacagaaac aaacagaatg agctagtaag cgtgtgtgca actgtttatc ttaacaagaa ttcaagtcgt ttaatttaa tcccacgtgt gttaaaaagt actttgatcc atttaggaaa ttcttaggtc tagtgagaat ttttttcaa ttttatttta gtctaaat atgtttcaga acaaaaagac aatgctgtac agttttatc ccttcagac atgaaaaggga acatatatat tccatatata tgttcaactc ttcatagatt gtgaactggc ccatcaatat ggtcaggaa atttgcagtc tacattttta agccaattta tttagaaaaa aaatttgagc tttaattctt taattttaag agaagtaata ttgtgaacta tgtattttta aatatgatca tgacacaca atgatgaatt ttttggccat ttacatagac atatctatta agtggaagaa	

126	1762	Galanin Receptor GalR1	NP_001471.1	agctttcttg aagtctgttt gcacaggttg catttgcttc caattgttag tagcgacacag agcttttgaa gctgtgctatt atgagataca gtogggtttac ctccaggagtc aattcagtggt tgtactggtg acctggggtg cagtagtagg cactgttgat tcaaatttat cctgtgaaac tggctttata gagttaacaa acacagagtc gagaccactg tcttaacagt ggaagatgca aataagtttt tgagaataaa actggatttt gaaattttac attagtactt gacaaaagt ttcattttgc cttgaatgga acctactaaa agagagagatg aaaaaaatc agcaggttg atgtagataa taatttctat gggaccaaaag ctatagacaga attcagtaag tcacatgaag taatggtcat gctgtatcat aaagcatatt tcaatgttga tttagatgac attcaaaaaa aatcatggga ctgaatatat ctggggtatc ctatcttcta caaatgcagt ctttttcatt aaatttgtaa tgatgtttaa tgaacatttc caccaaacat tatttcctct aaaaatgtta atttggggtt aaacacatca ccatttgaat ttcaaatgta gttttcatga caattttata ttgatgtgtg ttacaatga gaaaatggca tgaataattt aaattgtctt gtatcg SKPGKPRSTT NLFILNSIA DLAYLLFCIP FQATVVALPT WVIGAFICKE IHYFFTVSML VSIFTLAAMS VDRYVAIVHS RRSSSLRVS RALLGVGCIW ALSIAMASPV AYHQGLFHRP ASNQTFCEWQ WPDPRHKAY VVCTFVGYL LPLLLICFCY AKVLNHLHKK LKNMSKKSEA SKKTAQTVL VVVVFGISW LPHHIIHLWA EFGVFPLTPA SFLFRITAHK LAYSNSVNP IIYAFLSENF RKAYKQVFKC HIRKDSHLS D TKENKSRIDT PPSTNCTHV	Homo sapiens
127	1808	Gastric Inhibitory Polypeptide Receptor	NM_000164	ggcagcggtg caggggggtg caggagcaag tgaccagagag caggactggg gacaggcctg A atcgccccctg caggaaccag acctctgcc gcctctacga tgactacctc tccgactctg cagctgctgc tgggctcgc ctgtgctggg ctgctgctcc agaggcgga gacaggctct aaggggcaga cggcggggga gctgtaccag cgtgggaac cgtggggtc ctccgatatg gagaccttg cagcgcgga accgcttca ggcctgcct gtaacgggtc ctccgatatg tacgtctgct gggactatgc tgcacccaat gccactgccc gtgcgtcctg cccctggtag ctgcctggc accacatgt ggctgcaggt ttgcctctcc gccagtgtgg cagtgtggc caatggggac ttggagaga ccatacaca ttgtagaacc cagagaagaa tgaggccctt ctggaccaaa ggctcatctt ggagcggtg agcctgctc atcttgagt ttgtcaggcg gctacattgc tctctgcca cactgtgct agcctgctc caactgttc acgtcttca tgcgtcgagc tgcggccatt actagaaact ataccacat acctgacct ggcctctacc ttggggacca ggccttgctg ctgtggaacc aggcctcgc tgcctgcgc aggcctcaga tgcgtaccca gtactgcgtg ggtgccaact acacgtggt gctggtggag ggcgtctacc tgcacagtct cctggtgctc gtggaggct cggaggagg ccactccgc tactacctg tccctggctg gggggccccc gcgttttctg tcattccctg ggtgatcgtc aggtacctgt acgagaacac gcagtgtgg gagcgcaacg aagtcaaggc catttggttg attatacga ccccatcct catgaccatc ttgattaatt tctcatctt tatccgcat ctgggcatc tccgttccaa gctgaggaca cggcaaatgc gctgcgggga ttaccggctg aggtggctc gctccacgt gacgtggtg cccctgctg gtgtccaga ggtggtgtt gctccccga cagaggaaca ggcggggggc gccctgcgt tcgccaagct cggctttgag atcttctca gctcctcca gggcttctg gtcagcgctc tctactgct catcaacaag gaggtgcagt cggagatccg ccgtggctg caccactgcc gctgcgccg cagcctggg caggagcaac gccagctccc ggagcgcgcc	Homo sapiens

128	1808	Gastric Inhibitory Polypeptide Receptor	NP_000155.1	<p> tccgggccc tgcctccgg ctccggccc ggagggtcc ccaccagcc cggttgtcc  tcgggaccc tcccaggcc tgggaatgag gccagccggg agtggaaaag ttactgtctag  ggggcgggat cccgtgtct gttcagttag catgattta ttgagtcca actcgtgcc  aggccagta cggagacgc tgggaaaatg gtgaaagaaa cagaaaaag gtccctgcc  ttctggagat gacaactgag tgggaaaac agaccgtgaa caaaaaat caagtccac  acacgtatg gaatggttat gaagggaagc gagaagggg cctagggtg tctggaggc  gtctccaagg agtgacact taagccatcc ccgaagagag tgaagagat cacttgggg  agagctggag aacaggattc taggcggaag cagatagata ggcaaggcc cttggcgag  aaggcgctca gccttgctg gagtagaatt aagtcagac caacaggtg gggagagaca  gagaagtggc caggggcacc caagtggga ttcatctca ggtgcattg agattcttag  gagtgtctct tgggggtaaat attttattt ttaaaaaatg aggat  MTTSPILQLL LRLSLGILL QRAETGSKQ TAGELYQWE RYRRCQETL AAAPPSGLA P  CNGSFDMYC WDYAAPNATA RASCPWYLPW HHVAAQFVL RQCGSDQWG LWRDHTQCN  PEKNEAFLDQ RLILRLQVM YTVGYSLSLA TLLALLILS LFRLHCTRNI YIHINLFTSF  MLRAAAILSR DRLLPRPGPY LGDQALALWN QALAACTAQ IVTQYCVGAN YTWLLVEGVY  LHSLLVVGG SEEGHRYYL LLGWGAPALF VIPWVIVRYL YENTQCWERN EVKAIWWIIR  TPILMTILIN FLIFIRILGI LLSKLRTRQM RCRDYLRLLA RSTLTLPVLL GVHEVVFAPV  TEEQARGALR FAKLGFELF SSFQGLFVSV LYCFINKEVQ SEIRRGWHHC RLRRSLGEEQ  RQLPERAFRA LPSGSGPEV PTERGLSSGT LPGPNEASR ELESYC </p>	Homo sapiens
129	1813	Gastrin- Releasing Peptide Receptor	NM_005314	<p> ccagattcta aatatacga aagacgtgt gggaaaatag caggccaaa gtcttagta A  aactgcagcc agggagactc agactagaat ggaggtagaa agaactgatg cagagtgggt  ttaattctaa gccttttgtt ggctaagttt tgttgttgtt aacttattga atttagagt  gtattgcact ggtcatgtga aagccagagc agcaccagtg tcaaaaatagt gacagagagt  tttgaatacc atagttagta tataatgtact cagagtattt ttattaaaga aggcaaaag  cccgcatag atcttattct catcttcat cggttgcaaa atcaatagtt aagaaaatagc  atctaaggga acttttaggt gggaaaaaaa atctagagat ggctctaaat gactgtttcc  ttctgaactt ggaggtggac catttcatgc actgcaacat ctccagtcac agtgcggatc  tcccgtgaa cgtgactggg tcccaccgg ggatcctcta tgtcatccct gcagtttatg  gggttatcat tctgataggc ctcatggga acatcactt gatcaagatc ttctgtacag  tcaagtccat gcgaaacgtt ccaaacctgt tcatttccag tctggctttg ggagacctgc  tcctcctaata acgtgtgtc cagtggtatg ccagcaggta cctggctgac agatggctat  ttggcaggat tggctgcaaa ctgataccct ttatacagct tacctctgtt ggggtgtctg  tcttcacact cagcgctc tcggcagaca gataaaagc cattgtccgg ccaatggata  tccaggcctc ccatgccctg atgaagatct gcctcaagc cgcctttatc tggatcatct  ccatgtctgt ggcattcca gaggccgtgt tttctgacct ccatcccttc catgaggaaa  gcaccaacca gaccttcatt agctgtgccc cataccaca ctctaataag cttcacccca  aaatccattc tatggcttcc ttctgggtct tctacgtcat cccactgtcg atcatctctg  tttactacta cttcattgct aaaaatctga tccagagtgc ttacaatctt cccgtggaag  ggaatataca tgtcaagaag cagattgaat cccggagcgc acgtgctg  tgtttgtggg cctgtcgcc ttctgtggc tccccatca tgtcatctac ctgtaccgt  cctaccacta ctctgaggtg gacacctcca tgcctccact tgtcaccagc atctgtgcc </p>	Homo sapiens



130	1813	Gastrin- Releasing Peptide Receptor	NP_005305.1	<p> MALNDCFLN LEVDHFMHCN ISSHSADLPV NDDWSHPGIL YVIPAVYGV I ILIGLIGNIT P  LIKIFCTVKS MRNVNLFIS SLALGDLILL ITCAPVDASR YLADRWLFGR IGCKLIPFIQ  LTSVGVSFT LTALSADRYK AIVRPMIOA SHALMKICLK AAFIWIISML LAIPEAVFSD  LHPFHEESTN QTFISCAPYP HSNELHPKIH SMASFLVYV IPLSIISVY YFIAKNLIQS  AYNLPVEGNI HVKKQIESRK RLAKTVLVFV GLFAFCWLPN HVIYLYRSYH YSEVDTSMHL  FVTSICARLL AFTNSCVNPF ALYLLSKSFR KQFNTQLLCC QPGLIIRSHS TGRSTTCMTS  LKSTNPSVAT FSLINGNICH ERYV </p>	Homo sapiens
131	1814	Cholecystoki nin B Receptor	NM_000731	<p> atggagctgc tcaagctgaa cgggagctg cagggaaaccg gacccgggccc gggggcttcc A  ctgtgccgcc cggggggcgcc tctctcaac agcagcagtg tgggcaacct cagctgcgag  ccccctgca ttgcgggagc cgggacacga gaattggagc tggccattag aatcactctt  tacgcagtga tctctctgat gagcgttggg gaaatattgc tcatcactgt ggtcctggga  ctgagccgcc gcttgaggac tgtcaccaat gccttctccc tctcactggc agtcacggac  ctcctgcctg ctgtggcttg catgcccttc accctcctgc ccaatctcat gggcacattc  atctttggca cctgcatctg caaggcggtt tctcactca ggcggttgc tgtgagtgtg  tccacgctaa gctcgtggc catcgcactg ggcggttaca ggcacatctg cgcacactg  caggcacgag tgtggcagac gcgtccccc gcggtctggc tgattgtagc cagctggctg  ctgtccggac tactcatggt gccctacccc gtgtacactg tctgtcaacc agtggggcct  cgtgtgctgc agtgcgtgca tgcctggccc agtgcggggg tccgccagac ctggtccgta  ctgtgcttc tgcctctgtt cttcatcccg ggtgtggtta tggccgtggc ctacgggctt  atctctcgc agctctactt agggcttcgc ttgacggcg acagtgcag cgacagccaa  agcagggtcc gaaaccaagg cgggctgcca ggggtctgtc accagaaagg gcgttgccgg  cctgagactg gcgcggttgg cgaagacagc gatggctgct acgtgcaact tccacgttcc  cggcctgccc tggagctgac ggcgctgacg gctccaggggc cgggatccgg ctcccggccc  accaggcca agctgctggc taagaagcgc gtggtgcgaa tgtgtctggt gatcgttgtg  cttttttttc tgtgttggtt gccagtttat agtgcacaa cgtggcgcg ctttgatggc  ccgggtgcac accgagcact ctgggtgctt cctatctcct tcattcactt gctgagctac  gcctcgccct gtgtcaaccc cctggtctac tgcctcatgc accgtcgctt tgcacaggcc  tgcttgga aa ctgctgctgc ctgctgcccc cggcctccac gagctcgccc cagggtctt  cccgatgag accctccac tccctccatt gcttcgctgt ccaggcttag ctacaccacc  atcagcacac tgggcccctgg ctgaggagta gaggggccct gggggttag gcagggcaaa  tgacatgcac tgacccttcc agacatagaa aacacaaacc acaactgaca caggaaacca  acacccaaag catggactaa ccccaacgac aggaagaggt agcttacctg acacaagag  aataagaatg gagcagtaca tgggaaagga ggcctgctc tgatatggga ctgagcctgg  ccatagaaaa catgacactg accttgaga gacacagct ccctagcagt gaactatttc </p>	Homo sapiens

132	1814	Cholecystoki nin B Receptor	NP_000722.1	MELLKLNRSV QGTGPGPGAS LCRPGAPLLN LSRLRTVTN AFLLSLAVSD SSSVGNLSCE PPRIRGAGTR ELELAIRITL P YAVIFLMSVG GNMIIIVLG STLSLVAIAL ERYSAICRPL QARVWQTRSH AARVIVATWL LSGLMVPYP VYTVVQPVGP RVLQCVHRWP SARVRQTWSV LLLLLLFFIP GVMMAVAYGL ISRELYLGLR FDGSDSDSQ SRVRNQGLP GAVHQNGRCR PETGAVGEDS DGCYVQLPRS RPALELTALT APGPGSGSRP TQAKLLAKKR VVRMLLVIV LFFLCWLPVY SANTWRAFDG PGAHRALSQA PISFIHLISY ASACVNPLVY CFMHRFRQA CLETCARCCP RPPRARPRAL PDEDPTPSI ASLSRLSYTT ISTLGP	Hom o sapiens
133	1834	Glucagon Receptor	NM_000160	tacacagtgg gaactctgac aagggtgac ctgcctctca cacacataga ttaatggcac tgattgtttt agagactatg gagcctggca caggactgac tctgggatgc tctagtgtg acctcacagt gaccttccc aatcagcact gaaataacca tcaggcctaa tctcatacct ctgaccaaca ggctgttctg cactgaaaag gtcttccatc ccttccagt taaggaccgt ggccctgcc tctcttctt cccaaaactg tccaagaaat aataaattgt ttggcttctt cctgaaaaa aaaaaaaaaa aaaaaaaaaa aggaatttc MELLKLNRSV QGTGPGPGAS LCRPGAPLLN LSRLRTVTN AFLLSLAVSD SSSVGNLSCE PPRIRGAGTR ELELAIRITL P YAVIFLMSVG GNMIIIVLG STLSLVAIAL ERYSAICRPL QARVWQTRSH AARVIVATWL LSGLMVPYP VYTVVQPVGP RVLQCVHRWP SARVRQTWSV LLLLLLFFIP GVMMAVAYGL ISRELYLGLR FDGSDSDSQ SRVRNQGLP GAVHQNGRCR PETGAVGEDS DGCYVQLPRS RPALELTALT APGPGSGSRP TQAKLLAKKR VVRMLLVIV LFFLCWLPVY SANTWRAFDG PGAHRALSQA PISFIHLISY ASACVNPLVY CFMHRFRQA CLETCARCCP RPPRARPRAL PDEDPTPSI ASLSRLSYTT ISTLGP	Hom o sapiens
133	1834	Glucagon Receptor	NM_000160	ggatctggca ggcgcgcgaa gacgagcgtt caccggcgc cagaccgagc gcgccagag A gacggcggg agccaagccg acccccgagc aggcctcgcc gggccctgag gctcaaaagg gcagcttcag gggaggacac cccactggcc aggcgcgcc aggtctgtct gctctgccac tcagctgcc tcggaggagc gtacacacac accaggactg ccccccctgc agccacagcg cctgccagat gtggaggca gtagctgcc cagaggcatg ccccccctgc agccacagcg accctgctg ctgttctgc tgtgctggc ctgccagcca caggtcccct ccgctcaggt gatggacttc ctgtttgaga agtggaagct ctacgtgac cagtgacc accaactgag cctgctgcc cctccacgg agctgggtgt caacagaacc ttcgacaagt attcctgctg gccggacac cccgccaaata ccacggccaa catctcctgc ccttggtacc tgccttgcca ccacaaagt caacaccgt tcgtgttcaa gagatgcggg ccgacggctc agtgggtgcg tggaccccg gggcagcctt ggcgtgatgc ctcccagtc cagatggatg gcgaggagat tgagggtccag aaggaggtgg ccaagatgta cagcagcttc caggtgatgt acacagtggg ctacagcctg tccctggggg cctgctcct cgcctggcc atcctggggg gctcagcaa ctgcaactgc accgcaatg ccattccacgc gaattctgtt gcgtccttcg tgcgaaagc cagctccgtg ctggtcattg atgggctgct caggaccgcg tacagccaga aaattggcga cgacctcagt gtcagacct ggctcagtga tggagcgtg gctggctgcc gtgtggccgc ggtgttcagt caatatggca tcgtggccaa ctactgctgg ctgctgggtg agggcctgta cctgcacaa ctgctggcc tggccaccct ccccgagagg agcttcttca gcctctacct gggcacggc tgggtgccc ccatgctgtt cgtcgtccc tgggcagtgg tcaagtgtct gttcgagaa gtccagtgt ggaccagcaa tgacaacatg ggcttctggt ggatcctgcg gttccccgtc ttcttgcca tcttgatcaa ctcttctc ttcgtccgca tctgtcagct gctcgtggcc aagctgcggg cagggcagat gcaccacaca gactacaaat tccggctggc caagtccacg ctgacctca tccctctgct tccctctgct gggcgtccac gaagtgtctt ttgccttctg gacggacgag cagcccagg gcacctgctg ctcgcctcag ctcttcttgc accttctct cagctccttc cagggcctgc tgggtgctg tgcctactgc ttcctcaaca aggaggtgca gtcggagctg cggcgcggtt ggcaccgctg gcgcctggc aaagtgtctat gggaggagcg gaacaccag aaccacagg cctcatcttc gcccgccac ggcctccca gcaaggagct	Hom o sapiens

134	1834	Glucagon Receptor	NP_000151.1	<p> MPPCQPORPL LLLLLLLACQ PQVPSAQVMD FLFEKWKLYG DQCHNLSLL PPTELVCNR P  TFDKYSCWPD TPANTTANIS CPWYLPWHHK VQHRFVFKRC GPDGQWVRGP RGQWRDASQ  CQMDGEEIEV QKEVAKMYSS FQVMTYVGY LSLGALLLAL AILGLSLKH CTRNAIHANL  EASFVLKASS VIVIDGILLRT RYSQKIGDDL SVSTWLSDGA VAGCRVAADF MQYGIVANYC  WLLVEGLYLH NLLGLATLPE RSFFSLYLGI GWGAPMLFV PWAVVKCLFE NVQCWTSNDN  MGFWWILRFP VFLAILINFF IFVRIVQLLV AKLRARQMHK TDYKFRLLAKS TLLIPLLGV  HEVWFAFVTD EHAQGTLRSA KLFFDLFLSS FQGLLVAVLY CFLNKEVQSE LRRRHRWRL  GKVLWEERNL SNHRASSSPG HGPPSKELQF GRGGGSDSS AETPLAGGLP RLAESEPF </p>	Homo sapiens
135	1925	Gonadotropin -Releasing Hormone Receptor	NM_000406	<p> ttggttgctg gtccacttac aaacactttt catatttgta tgtctttcca atggttatcc A  tggtttgttc atttcaggca tatggccctg atcagattaa ctgacatgat gtatatgcaa  agccttttga gttcttcaga aaaataaaat atcttattca agactgattg cttataagga  acttattata gttaatatag taggcacaaat ttttttttga attctcctag atgagtcaga  acttagtttt gatgtaggta aaaattttat ggtcacaaat ctcaggtgtg agaaaaatctc  tttccttgat actctatata aatagaggat ataaatattt caagtcctgga agtagtgaga  gaagctggta attctggaca tatagtga gtaaaaaagg agtcaggta caggactggg  ctaagctgct caagattcag gagacagcca gtacacagag aagctgagga aataatacag  atatactaa aacacttctc taacctcttg tggtaacaaag ctccttaaaag gggctggatg  atgttggtgt cactttttat caccagcaaa ggctaagata atgtatatag taaatattta  gtaaccattt attaaataaa taaatattta agacagaata aacaagtata ataaatgaac  caataagaat gcaccatcta agtcaaaaata gccactttta tccttaacat tgtacctgct  ttggctgctg cagaagcaaa ctgttggtgca tttagacaaat caagctgggtg atttaataaa  ttccaatgta agtcttacca gtattgatga ataactatcc agcactcacc atgaaagtta  aagaagcaac acagaaaaag ttcttaagtg gtcccaattt gaaatgatca gataacatat  aaaagaacat attcatatta tactaacata aacacatata aatgcactta cagcagttac  acagtattct cttcaataac tagtttctct atgcatatgaat gtgtaataac agcaactaca  atatttagat aattataaaa accaaggcaa taatttaaaa actgattaac cgttttactc  taacttaagc atggattgga tcagtaagat tgattaataa attggaatgc agtcagttgg  attgattcta atttaagtt ttaatttggt gtagaataat ttaagtga tatatttgct  cagtggttga gtgctcaaca gtgtgtttga aaaggaaaaa aaagaatgtt ttgagaatgt  gttaattcct taagacaatg gattttaatt ggatctgttg ttttcatttt tcttcattat  cattatacat ctgtatgttg gacagaacac taacactaaa tagtttttag aaagtgtttt  ttgaagttaa ttaaatcata atatcatgac tgacttttga attcaaaat aggcgtgtgac  tatccttctt cacttaggaa gagtgtgtg aaagccagac catctgtga ggtgctacag  ttacatgtgg ccctcagaat gcgtttggcc tgcctgtgtt tagcactctg ttggattacc </p>	Homo sapiens

136	1925	Gonadotropin NP_000397.1 -Releasing Hormone Receptor	aatacacaaa acaagttaac ctttgatctt tcacattaag tatctcaggg aaaaaatttg acatacgtct aaacctgtga cgtttccatc taaagaaggc agaaataaaa catgacattt agattcgggt acaataaaat atcagatgca ccagagacac aaggcttgaa gctctgtcct gggaaaaatat ggcaaacagt ccactgatg cagggaacc tcccactct gacctgtct ggaagatcc acaacagcat cccactgatg tactttcttc ctttttctgc tctctcgac ctttaagtct tttttctgt tgaaccttca gaagtggaca cagaagaaag agaaagggaa aaagctctca agaatagaagc tgctcttaaa acatctgacc ttagccaaac tgttgagac tctgattgtc atgccaatgg atgggatgtg gaacattaca gtccaatggt atgtatgcc cagcttcat gatgtgtgtg atcagcctgg gttatctaaa gcttttctcc atgtatgcc aggccctag cttgaaaaa caacagcaa gtggacagt accgtccct ggctatcacg aggccctag atcctcagta gtgtctttgc agaccacag ttatacatc ccatggttg cctggcctgg acactcagta gacagctctg gacagacaaa agtttctct caatgtgtaa tcaggatgat tcactatgca gacagctctg tgggtggcgc aagcatttta taacttttt acccticagct cacactgcag tttttcaca tttcatcagc gacccccag aactacaact gaatcagtc aagaacaata gcctcttcat catccctctt cttcatcagc gacccccag actctaaaaa tgacgtgtgc atttgacct tcaattactg tgacacgggt ccttcatcag gacccccag actctaaaaa tgacgtgtgc atttgacct tcaattactg taccaagagc acggctgaag acctctactat gtcttaggaa tttgttatgt gtttgatcct gaaatgttaa tctgctggac tccctactat gtcttaggaa tttgttatgt gtttgatcct gaaatgttaa acaggtgtgc agaccagta aatcacttct tctttctctt tgccttttta aacctatgct ttgatccact tatctatgga tattttctc tgtga	Homo sapiens
137	1945	Opsin, green-sensitive	atggcccagc agtggagcct ccaaaggctc gcaggccgcc atccgcagg aagctatgag A gacagcacc agtcagcat cttcacctac accaacagca actccaccag aggcccttc gaaggcccg attacacat cgtctccaga tgggtgtacc accccaccag tgtctggatg atctttgtgg tcatgcatc cgttttcaca aatgggcttg tctggcggc caccatgaag ttcaagaagc tgcgccacc gctgaactgg atcctgggta acctggcggc cgtgacctg gcagagacc tcacgccag cactatcagc gtttgaacc aggtctatgg ctactctgtg ctggccacc ctatgtgtg cctggaggc tacacctct cctgtgtgtg gatcacaggt ctctggtctc tggccatcat ttcctgggag agatggatgg tggcttgcaa gcccttggc aatgtgagat ttgatgcaa gctggccatc gtgggcatg ccttctcctg gatctgggt gctgtgtgga cagccccgc catctttggt tggagcaggt actggcccc cggcctgaag acttcatcg gccagagct gtccagcgc agctcgtacc ccggggtgca gtctacatg attgtcctca tggtcacctg ctgcatcacc ccaactcaga tcatcgtgct ctgtaacctc caagtgtggc tggccatcgc agcgttgga aagcagcaga aagatctga atccaccag aaggcagaga aggaagtgc gcgcatggtg tgggtatgg tctggcatt ctgcttctgc tggggaccat acgcttctt cgcattgctt gctgctgca accctggcta ccccttccac	Homo sapiens

138	1945	Opsin, green- sensitive	NP_000504.1	<p> cctttgatgg ctgcccctg gcccttcttt gccaaaagtg ccactatcta caaccccggtt  atctatgtct ttagtaaccg gcagtttcga aactgcatct tgcagctttt cgggaagaag  gttgacgatg gctctgaact ctccagcgcc tccaaaacgg aggtctcatc tgtgtcctcg  gtatcgccctg catga </p>	Homo sapiens
				<p> MAQQWSLQRL AGRHPQDSYE DSTQSSIFTY TNSNSTRGPF EGPYHIAPR WYHLTSVWM P  IFVVIASVET NGLVLAATMK FKKLRHPLNW ILVNLAVADL AETVIASTIS VVNQVGYGFV  LGHPMCVLEG YTVSLCGITG LWSLAIISWE RMWVCKPFG NVRFDAKLAI VGIAFSWIWA  AVWTAPPIFG WSRYPWPHGLK TSCGPDVFSG SSYPGVQSYM IVLMVTCCIT PLSIIVLCYL  QVWLAIKRAVA KQKSESESTQ KAEKEVTRMV VVMVLAFCFC WGPYAFFACE AAANPGYPFH  PLMAALPAFF AKSATIYNPV IYVFMNRQFR NCILQLFGKK VDDGSELSSA SKTEVSSVSS  VSPA </p>	
139	1951	Growth Hormone Secretagogue Receptor	NM_004122	<p> atgtggaacg cgacgcccag cgaagagcgg gggttcaacc tcacactggc cgacctggac A  tgggatgctt cccccggcaa cgactcgctg ggcgacgagc tgcctgcagct cttccccgcg  ccgctgctgg cgggctgtac agccacctgc gtggcactct tctgtgtggg tategctggc  aacctgctca ccatgctggt ctcgcatctg tcccgagcgc tgcgcaccac caccacctc  tacctgtcca gcatggcctt ctcgcatctg ctcactcttc tctgcatgcc cctggacctc  gttcgctctt ggcagtaccg gccctggaac ttcggcgacc tctctgcaa actcttccaa  ttcgtcagtg agagctgcac ctacgccacg gtgctaccca tcacagcgtc gagctcgag  cgctacttcg ccactgctt cccactccgg gccctctgca gcgcgggccc catctctgtg  aagctggtea tcttcgtcat ctgggcccgt gccctctgca gcgcgggccc catctctgtg  ctagtcgggg tggagcacga gaacggcacc gacctgggg acaccaaga gtgcgcgccc  accgagtgg cggtcgctc tggactgtc acggctatgg tgtgggtgtc cagcatcttc  ttcttcttc ctgtcttctg tctcacggtc ctctacagtc tcctcggcag gaagctgtgg  cggaggaggc gcggcgatgc tgtcgtgggt gcctcgctca gggaccagaa ccacaagcaa  accgtgaaaa tgcctgggtg gtctcagcgc gcgtcagcg tttctctcgc gggctcctatc  ctctccctgt gcccttctcc tctctctga </p>	Homo sapiens
140	1951	Growth Hormone Secretagogue Receptor	NP_004113.1	<p> MWNATPSEEP GFNLTLADLD WDASPGNDSL GDELLQLFPA PLLAGVTATC VALFVVGIAG P  NLLTMLVSR FRELRTTNL YLSSMAFSDL LIFLCMPLDL VRLWQYRPWN FGDLLCKLFQ  FVSECTYAT VLTITALSVE RYFAICFPLR AKVVVTKGRV KLIVFVIWAV AFCSAGPIFV  LVGVEHENG DWDTNECRP TEFAVRSGLL TVMVWVSSIF FFLPVFCLTV LYSLIGRKLW  RRRGDAVVG ASLRDQNHKQ TVKMLGGSQR ALRLSLAGPI LSLCLLPSL </p>	Homo sapiens
141	1954	Growth Hormone- Releasing Hormone Receptor	NM_000823	<p> agcagccaa gcttactgag gctggtggag ggagccactg ctgggctcac catggaccgc A  cggatgtgg gggccacgt ctctcgctg ttgagccgt taccgacctg attgggccac  atgcacccag aatgtgactt catcacccag ctgagagagg atgagagtgc ctgtctacaa  gcagcagagg agatgcccac caccacctg ggtgcctg cgacctggga tgggctgctg  tgctggccaa cggcaggctc tggcagatgg gtcacctcc cctgcccga tttcttctct  cacttcagct cagagtcagg ggctgtgaaa cgggatgta ctatcactgg ctggctctgag  ccctttccac cttacctgt gccctgccc ttgcctctgg agctgctggc tgaggaggaa  tcttacttct ccacagtga gattatctac accgtgggcc atagcatctc tattgtagcc  ctcttcgtgg ccataccat cctggttct ctacaggagg tccactgccc ccggaactac  gtccacacc agctgttcac cacttttctc ctcaaggcgg gacgtgtgtt cctgaaggat </p>	Homo sapiens

142	1954	Growth Hormone- Releasing Hormone Receptor	NP_000814.1	<p>gctgcccttt tccacagcga cgacactgac cactgcagct tctccactgt tctatgcaag  gtctctgtgg cgcctctcca ttctgcacc atgaccaact tcagctggct gttgacagaa  gccgtctacc tgaactgcct cctggcctcc accctcccca gctcaaggag agccttctgg  tggtctgttc tgcctggctg gggctgccc gtgctcttca ctggcacgtg ggtgagctgc  aaactggcct tcgaggacat cgcgtgctg gactggagc acactccc cactgggtgg  atcatcaag ggcctattgt cctctcgtc ggggtgaact ttggctttt tctcaatatt  atccgcctcc tggtaggaa actggagcca gctcagcca gctccatc cagctctcag  tattggcgtc tctccaagtc gacacttttc ctgacccac tctttggaat tcactacatc  atcttcaact tctgcccaga caatgctggc ctgggccctt gcctcccc ggagctggga  ctgggttctt tccagggctt cattgttgc atctctact gcttctcaa ccaagaggtg  aggactgaga tctcacggaa gtggcatggc catgacctg agcttctgcc agcctggagg  accgtgcta agtgaccac gccttccgc tggcgggcaa aggtctgac atctatgtc  taggtgctt catcacgcca ctggagtcca cactgaatt tgggcagcta ccacgggtct  gccatgctct ggaggagcaa gggggccaca tcccccccc agctgttacc cagcccgggg  caggtgcagc ccttctctcc tgtctctgca tctgactctc ttttgaggtc cctgtatgtc  tacctctgac ttctgtgtgc cctctgtgc tgcctcatc cattcctctt actggggcct  gggctctag ccaaggctc agaggagcca ataaacctgt aaaaataa aaaaaa  GLLCWPTAGS GEWTLPCPD FFHFSSSE AVKRDCTITG WSEFPFYPV ACPVPLELLA  EEESYFSTVK IIVTVGHIS IVALFVAITI LVALRLHCP RNYVHTQLFT TFIKAGRVF  LKDAALFHSD DTDHCSFSTV LCKVSVAAASH FATMNFPSWL LAEAVYLNCL LASTSPSSRR  AFWLVLAGW GLPVLFTGTW VSKLAFEDI ACWLDLDTSP YWIIKGPV LSVGVNFGLE  LNIIRILVRK LEPAQCSLHT QSQYWRLSKS TLFILPLFGI HYIIFNLPD NAGLIRLPL  ELGLGSFQGF IVALLYCFIN QEVRTAISRK WHGHDELLP AWRTRAKWTT PPSRAAKVLT  SMC</p>	Homo sapiens
143	2120	Histamine H1 Receptor	NM_000861	<p>caggagagaca tacaggattt aagaagcca tcatggagaa gaccttcaat tacagagata A  aaaagtthtt cttgtggaac agttaaac tagatggcag ataacagact gaggagttag  ctgcttctga ctcgattaaa aaggagtgga gccataaact ggcgtgctc ttctgccaat  gagcctccc aattcctct gcctcttaga agacaagatg tgtgaggga acaagaccac  tatggccagc cccagctga tgcccttggg ggtggtcctg agcactatct gcttgggtcac  agtagggctc aactgctgg tgcgtatgc cgtacagagt gagcggaaagc tccacactgt  ggggaacctg tacatcgtca gcctctcgtt ggcggacttg atcgtgggtg ccgtcgtcat  gcctatgaac atcctctacc tgctcatgtc caagtgtca ctgggccgtc ctctctgcct  ctttggctt tccatggact atgtggccag cacagcgtcc atttccagt tcttctctc  gtgcattgat cgtaccgct ctgtccagca gccctcagg taccttaagt atcgtaccaa  gacccagacc tggccaacca ttctgggggc ctggtttctc tcttttctgt ggtttattcc  cattctaggc tggaaatcact tcatgcagca gacctgggtg gcgcgagagg acaagtgtga  gacagacttc tatgatgtca cctggttcaa ggtcatgact gccatcatca acttctacct  gccacacttg ctcatgctct ggttctatgc caagatctac aaggccgtac gacaacactg  ccagaccgg gagtcatca ataggtccct ccttctctc tcagaaaita agctgagggc  agagaacccc aagggggatg ccaagaaacc agggaaagag tctccctggg aggttctgaa</p>	Homo sapiens

aaggaagcca aaagatgctg gtggtggatc tgtcttgaag tcaccatccc aaacccccaa  
ggagatgaaa tccccagttg tcttcagcca agaggatgat agagaagtag acaaacctcta  
ctgctttcca cttgatattg tgcacatgca ggtcgcggca gagggagta gcagggacta  
ttagccctc aaccggagcc atggccagct aggatcagat caagacagat gagcagggcc tgaacacaca  
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ggactcagat accaccacag agtttacttg aggaaggctc cgctcgcat caagacatga  
cacaggcctg gattacatca accgcgaaag gaagccgccc aaacagttgg gttttatcat  
tgtatctggg ttgcacatga accgcgaaag gaagccgccc aaacagttgg gttttatcat  
ggcagccttc atcctctgct ggtcccttta ttccatcttc ttcatggtca ttgccttctg  
caagaactgt tgcaatgaac atttgcacat gttccaccat tggctgggct acatcaactc  
cacactgaac cccctcatct accccttggt caatgagaac ttcaagaaga cattcaagag  
aattctgcat attcgctcct aaggagggtc ctgaggggat gcaacaaaat gatccttatg  
atgtccaaca aggaataga ggacgaaggc ctgtgtgttg ccaggcaggc acctgggctt  
tctggaatcc aaaccacagt cttaggggct tggtagtttg gaaagtctt aggcaccata  
gaagaacagc agatggcgtt gatcagcaga gagattgaac tttagaggag agcagaatc  
tttgcaagaa agtcagacct gttcttgta actgggttca aaagaaaaa aataataaaa  
ataaagaga gagagaatca gacctgttg gaactcctt gctcctcagg aactatggga  
gctcagact catgttaatt caagctttcc gagtcaagt attgacaact gaagagacac  
gtggctaggg ttccactgga gaattgaaaa ggactcttga gccctcctgg aatggagctg  
tataactgtg cagagctttt atccatgcca atagttgctg tccccctcca ggggtcacct  
tgagaggcat gacagctgtt ccacaggggc tatecctct cagaaaaact ctctctgag  
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atttcttact caacatgtt tagagtggat agaaaattat gcagcttga caccatcat  
ctttaacccc aaattcctt tggctattaa aaaagtgggt gcaaaaggca tccctcaaaa  
aaagagaaat gaaatatttt tgaatggtt cacttataaa attaaagaa ggaatggggg  
cagaatgcca tattttgag ggctgtacta ggtttatctc atttaagccc cacaacaccc  
cacaggagg taattttcta actctagtt gcagaggagc aaattgaggt tcagcaaggt  
gagagaggta cccaaggtca catagctagt tatgtgagaa agttagagta cagatcctct  
ggggtttcag cttatgttag cataatttct cggaaaggca aaaatgtgcc cttttggccg  
ggcatggtag ctcaagccta taatcccagc atgttgagag gctgaggtgg gcagatcatt  
tgaggccagg agttcaagac cagtctggcc aatatggaga aacctgtct ctactaaaa  
cacaaaaatt atctgggcat ggtggggcat gcctgtagtc ccactactt gggaggccga  
ggcacgagaa tcgcttgaac ccgggaggtg gaggttgccg tgagccaaga tcacgccact  
gcactccagc ctgggcaaca gagcaagact ctgtctcaaa aaaaaaata caatatatta  
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gaaggggacg ctttgaagga accaagtga tttttatctg tgagtctgt tgtgtttgtc  
aaaaagtcac tgtaactctt catagccata cctggtaagc aaaaactagt aaagacatag  
gaacatgtag ttttacttgg tgtttatgtt gcaatctggt tgtgatttat attttaaagc  
ttggtgctaa accacaatat gtatagcaca tggagtgcct gtacaagctg atgttttga  
ttttgtgttc ctctttgcat gatctgtcaa agtgagatat ttttacctgc ctaaaaatatg

144	2120	Histamine H1 NP_000852.1 Receptor	atgtttaaaa gcataactcta tgtgatttat ttattttctac ctttctgagt ctttggact aagaagatgt tttgaaatgt accatcaaat gtttaacagag tttgatatgg gctttctctt tggtttctca tcacatttgt aatgtcttt tcaaaaggat ttactttttg taaaaagctt cattctcact ctgctttgca tcccccaaac ttcttgttca aaacggggg agtttaggag actttaatcc cggtttcaga agctgcagct ggtctgttcc caggtcagaa accattgttc agaagacctc cctgtgagag agtgtctcct cagggtccct caggaccaa gaacactcga aaagagcact tcacacagac aagtggctaa gtgtccatta tttaacctga acaatcaagg caactagtgg agagaactga ttgtgagctc MSLNPSSCLL EDKMGEGNKT TMASPOLMPL VVVLSTICLV TVGLNLLVLY AVRSEKLTHT P VGNYIIVSLV VADLIVGAW MPMNILYLIM SKWSLGRPLC LFWLSMDYVA STASIFSVEI sapiens LCIDRYRSVQ QPLRYLKRYT KTRASATILG AWFLSFLWVI PILGNHFMQ QTSVRREDKC ETDFYDVTF KVMTAIINFY LPTLLMLWFY AKIYKAVRQH CQRELINRS LPSESEIKLR PENPKGDAK PGKESPWEVL KRPKPDAGG SVLKSPSQTP KEMKSPVVF QEDDREVDKL YCFPLDIVHM QAAAEGSSRD YVAVNRSHGQ LKTDQGLNT HGASEISEDQ MLGDSQSFSR TDSDTTETA PGKGLRSGS NTGLDYIKFT WKRLRSHSRQ YVSGLHMNRE RKAQKQLGFI MAAFILCWIP YFIFPMVIAF CKNCCNEHLH MFTIWLGYIN STLNPLIYPL CNENFKKTFK RILHRS
145	2121	Histamine H2 NM_022304 Receptor	ctctgccc ccactgactc cagagaggga gatccccagt acttgactcc atcacgcaga A tgaggagcagg caccagctat ggagagggat acagctgcgt ctccacatga cccatctcgc sapiens atgacaccaa agccaccgcc agacagtgc tcggattcta tgcaaaacct gggaagcgga gacctacccc agccccggga ggaagctagc tcttcagggg accgtctgag gactggagtt tgatccatga acctggcttc gaggccttgc tttctctct tcttcattca tattcatcc caacacctta gaagtgttg cttaatttat ttctagaaaa gcagcccaga gtcagtcat gaagccttcc ccacccctg gccaaaaaaa aaaaactggac acattttgga tctgttgga gcttgagtc cagtgttg gcatgtgtc acattgggag cagagaagaa gcaaccagg gccctgatca gggactgag ccgtagagtc ccaggatggc acccaatggc acagcctctt ccttttgctt gactctacc gcattgcaaga tcaccatcac cgtggtcctt gcgtcctca tctcatcac cgttgcctgc aatgtggtc tctgtctggc cgtgggcttg aacgcccgc tcgcaacct gaccaattgt ttcatcgtgt ccttggtctat cactgacctg ctcctcgcc tctgtgtgt gcccttctct gccatctacc agctgtcctg caagtggagc tttggcaagg tcttctgcaa tatctacac agcctggatg tgatgctctg cacagcctcc attcttaacc tcttcattgat cagcctcgac cggtaactgc gctgcatgga cccactgcgg tacctgtgc tggtaacccc agttcgggtc gccatctctc tggctttaat ttgggtcatc tccattaccc tgtcctttct gtctatccac ctggggtgga acagcaggaa cgagaccagc aagggaatc ataccacct taagtgaaca gtccaggta atgaagtga cgggctggtg gatgggctgg tcaccttcta cctcccgcta ctgactatgt gcatcaccta ctaccgcac ttcaagggtc cccgggatca ggccaagagg atcaatcaca ttagtctctg gaaggcagcc accatcagg agcacaaaac cacagtaca ctggccgccg tcatgggggc cttcatcatc tgctggtttc cctacttcac cgcgtttgtg taccgtgggc tgagagggga tgatgccatc aatgaggtgt tagaagccat cgttctgttg ctgggctatg ccaactcagc cctgaacccc atcctgtatg ctgcgctgaa cagagacttc cgcaccgggt accaacagct cttctgctgc



146	2121	Histamine H2 Receptor	NP_071640.1	MAPNGTASSF AITDLLLGLL MDPLRYPVLV VYGLVDGLVT GAFIICWFPY QLFCCRLANR tgcagcactc cgccccgagc cgacagcaac ggccatcccg caactcgctg ttacatatatt tacgggtctac cattgattac ctacattgcc gacatcaaat tggaggcacc tgatgactac gatccctgtc ccggctcctt cctgggtgtg ggaggctctg cgccttaggc cttcaagcgg cactagcaga gaataaacca MESPIQIFRG IITAVYSWVF MNSWPFQDVL CIWLLSSSVG IIIVCYTIMI STSHSTAALS RNTVQDPAYL ggccgccccat	ccacaaaaact caggcaacag ccccaggga gggaggggat atgttctagg gccccaaag ttggcaagg ITWLAVALIL SCKWSFGKVF LIWVISITLS TYRIFKVAR GDDAINEVLE ASQLSRTQSR ccccgattca cccccaacag gctcggagga cggcggtcta tgatcatccg tgacagatgc cctggccttt tcaccagcat ccgtgaaggc ggctgtgtgc aagacgtcga acctcttcat tcgtctgcta gagagaaaga tcgtctctg cccacagcac gtagcctgaa acttctgctt cagttcagga tcctgcttac gtcttcgtac ag	tctctgaggt gaagagaaac gccacagaca gtactatgatg aactcttcat gtagaacctta cgcacagct ttggcaagg ITVAGNVVVC CNITSLDVM FLSIHLGWS DQAKRINHIS AIVLWLGYN EPRQEEKPL gatcttcgc cagcgctg cgcgcagctg ctcctgtagt atgacaaaag tttagttact tggggatgtg cttcacctg tttggaactc gtcatctgtt tgtcattgag gaagatctgc cacctctgat tcgcaacct ctggactccc ctggactccc agctgctctc tcccattctc tccactgaag tcctgcttac gtcttcgtac ag	ccaagcctc ccctgaagct ggtaatagcc ggaatgatta gagcactttg gtccctttt ggggcat LAVGNLRRL LCTASINLF RNESKGNHT SWKAATIREH SALNPILYAA KLQWSGTEV ggggagcctg tttcccggt gagcccgcg tctcgtggtg atgaagacag acaacctag ctgtgcaaga accatgatga cgcacacct ggcatctctg tgctccttgc gtcttcatct atcctgcgtc cgtaggatca attcacatat tccagctatt tacgcctttc atgaggatgg ctgaggggaca tcgatgggat	Homo sapiens
147	2783	Opioid Receptor, kappa 1 (OPRK1)	NM_000912	gccccgagc cgacagcaac ggccatcccg caactcgctg ttacatatatt tacgggtctac cattgattac ctacattgcc gacatcaaat tggaggcacc tgatgactac gatccctgtc ccggctcctt cctgggtgtg ggaggctctg cgccttaggc cttcaagcgg cactagcaga gaataaacca MESPIQIFRG IITAVYSWVF MNSWPFQDVL CIWLLSSSVG IIIVCYTIMI STSHSTAALS RNTVQDPAYL ggccgccccat	gacctgctgc gctcggagga cggcggtcta tgatcatccg tgacagatgc cctggccttt tcaccagcat ccgtgaaggc ggctgtgtgc aagacgtcga acctcttcat tcgtctgcta gagagaaaga tcgtctctg cccacagcac gtagcctgaa acttctgctt cagttcagga tcctgcttac gtcttcgtac ag	ggggagcctg tttcccggt gagcccgcg tctcgtggtg atgaagacag acaacctag ctgtgcaaga accatgatga cgcacacct ggcatctctg tgctccttgc gtcttcatct atcctgcgtc cgtaggatca attcacatat tccagctatt tacgcctttc atgaggatgg ctgaggggaca tcgatgggat	gcccctacctg A gggcccagcc acatctcccc gcttgggtggg caaccaaact cctttcagag tagtaatttc gcgtggaccg tgaaggcaaa caatagtctt agttccacga ttgccttctg ttgccttctg tcaagagcgt ccagactggg tcactcctgg acttctgcat ttgatgaaaa agcggcagag tcgatgggat	Homo sapiens
148	2783	Opioid Receptor, kappa 1 (OPRK1)	NP_000903.1	gccccgagc cgacagcaac ggccatcccg caactcgctg ttacatatatt tacgggtctac cattgattac ctacattgcc gacatcaaat tggaggcacc tgatgactac gatccctgtc ccggctcctt cctgggtgtg ggaggctctg cgccttaggc cttcaagcgg cactagcaga gaataaacca MESPIQIFRG IITAVYSWVF MNSWPFQDVL CIWLLSSSVG IIIVCYTIMI STSHSTAALS RNTVQDPAYL ggccgccccat	gacctgctgc gctcggagga cggcggtcta tgatcatccg tgacagatgc cctggccttt tcaccagcat ccgtgaaggc ggctgtgtgc aagacgtcga acctcttcat tcgtctgcta gagagaaaga tcgtctctg cccacagcac gtagcctgaa acttctgctt cagttcagga tcctgcttac gtcttcgtac ag	ggggagcctg tttcccggt gagcccgcg tctcgtggtg atgaagacag acaacctag ctgtgcaaga accatgatga cgcacacct ggcatctctg tgctccttgc gtcttcatct atcctgcgtc cgtaggatca attcacatat tccagctatt tacgcctttc atgaggatgg ctgaggggaca tcgatgggat	gcccctacctg A gggcccagcc acatctcccc gcttgggtggg caaccaaact cctttcagag tagtaatttc gcgtggaccg tgaaggcaaa caatagtctt agttccacga ttgccttctg ttgccttctg tcaagagcgt ccagactggg tcactcctgg acttctgcat ttgatgaaaa agcggcagag tcgatgggat	Homo sapiens
149	2964	Luteinizing	NM_000233	gccccgagc cgacagcaac ggccatcccg caactcgctg ttacatatatt tacgggtctac cattgattac ctacattgcc gacatcaaat tggaggcacc tgatgactac gatccctgtc ccggctcctt cctgggtgtg ggaggctctg cgccttaggc cttcaagcgg cactagcaga gaataaacca MESPIQIFRG IITAVYSWVF MNSWPFQDVL CIWLLSSSVG IIIVCYTIMI STSHSTAALS RNTVQDPAYL ggccgccccat	gacctgctgc gctcggagga cggcggtcta tgatcatccg tgacagatgc cctggccttt tcaccagcat ccgtgaaggc ggctgtgtgc aagacgtcga acctcttcat tcgtctgcta gagagaaaga tcgtctctg cccacagcac gtagcctgaa acttctgctt cagttcagga tcctgcttac gtcttcgtac ag	ggggagcctg tttcccggt gagcccgcg tctcgtggtg atgaagacag acaacctag ctgtgcaaga accatgatga cgcacacct ggcatctctg tgctccttgc gtcttcatct atcctgcgtc cgtaggatca attcacatat tccagctatt tacgcctttc atgaggatgg ctgaggggaca tcgatgggat	gcccctacctg A gggcccagcc acatctcccc gcttgggtggg caaccaaact cctttcagag tagtaatttc gcgtggaccg tgaaggcaaa caatagtctt agttccacga ttgccttctg ttgccttctg tcaagagcgt ccagactggg tcactcctgg acttctgcat ttgatgaaaa agcggcagag tcgatgggat	Homo

Hormone/Chor  
iogonadotrop  
in Receptor

sapiens

agcgcgcgct gccacgagcg ctgcgcgagg cgctctgccc tgagccctgc aactgcgtgc  
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ccttcttcat aatttgtct tgctacatta aaatttatt tgcagtctga aaccagaat  
taatggctac caataaagat acaagattg ctaagaaaat ggcaatcctc atctcacg  
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ccaatccatt tctgtatgca atattcacta agacattcca aagagatttc tttcttttgc  
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taaaaactat ttgtcattgt tacatggcat aaatatgaag ttgagagtgt ttagaaaaat  
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ataacagatc agaaatttaa ataaggggc tttttcttca ggtagtttga aaaaacacat

150	2964	Luteinizing NP_000224.1 Hormone/Chor iogonadotrop in Receptor	ctagagatgc actgtttcaat tcggtacgca ctaggcacat gtggctaaat taaaattaaa taaaatgaga aatgtagttt ctacgttgca ctacgtttca agttctcaat ggctacgtca agttctcaat ggctacgtgt gactagtgt taccatactg gacagcacag acacagaata ttttcatcac cacagaaagt tctatctgtt tctattataga gacttttatg tatgacctat ctggattcta ctattattata atttaaggta aacatctgaa agcacatttc agcttatttg cttagtgaaa cattaaagctg tagactgtaa actcctctgtg agtaggaacc ctgtctcagt gcattttgtt ttctctgcttc ctacctcaag atcttggcaa tggtagacta caaatgtgct gagttagaat tactctgaag ttatgaaaca tataatgaaa acaatttttc cggcc MKQRFSAQL LKILLLLQPP LPRALREALC PEPNCVDPG ALRCPGPTAG LTRLSLAYLP P VKVIPSOAFR GINEVIKIEI SQIDSLERIE ANAFDNLNL SEILIONTKN LRYIEPGAFI NLPGLKYSI CNTGIRKFPD VTKVFSESN FILEICDNLH ITTIPGNAFQ GNMNESVTLK LYNGGFEEVQ SHAFNGTTLT SLELKENVHL EKMHNAGFRG ATGPKTLDIS STKLQALPSY GLESIQRLIA TSSYSLLKKLP SRETFVNLE ATLTPSHCC AFRLNPTKEQ NFHSISSENF SKQCESTVRK VSNKTLYSSM LAESELGWD YEGFCLPKT PRCAPEDAF NPCEDIMGYD FLRVLWLIN ILAIMGNMTV LFVLLTSRYK LTVPRFILMCN LSFADFCMGL YLLLIASVDS QTKQYYNHA IDWQTSGSCS TAGFTTFVAS ELSVYTLTVI TLERWHTITY AIHLDQKLRL RHAILIMLG WLFSSLIAML PLVGVSNYMK VSICFPMDVE TTLSQVYILT ILILNVVAFF IICACYIKIY FAVRNPELMA TNKDKIAKK MAILIFTDFT CMAPISFFAI SAAFKVPLIT VTNSKVLVL FYPINSCANP FLYAIFTKF QRFDFLLLSK FGCKRRRAEL YRRKDFSAYT SNCKNGFTGS NKPSQSTLKL STLHCQGTAL LDKTRYTEC	Homo sapiens
151	2976	Lysophosphat NM_001401 idic Acid Receptor Edg2	acggcgcgct gggtcacac tgtcccgccg cggacgggct ttgtggttg gggcgcgctg A gcgagtgcca gtgagagtgt gggtgcgcgc tgtggggccg ggctggggtg gggtggcggtg cgttcttgctg agcggccctg caggaggcga ggctcccttg gcctcccgca cccagcggtg gaccgagccc ctggagggaa gttgcgcgag ccgcccgggc cgtgcccgc cctgtcccgc gccaggtaca cagcttctcc tagcatgact tgcattctat cagcaaaaca gaaaatttgt ctcccgtagt tctggggcgt gttcacacc cagttcacag gagctgtcat ggctgcccac tctacttcca tccctgtaat ttcacagccc cagttcacag ccatgaatga accacagtgc ttctacaacg agtccattgc cttcttttat aaccgaagtg gaaagcatct tgcacagaa tggaacacag tcagcaagct ggtagtgga cttaggaatca ctgtttgtat cttcatcatg ttggccaacc tattggtcat ggtaggcaatc tatgtcaacc gccgcttcca ttttctctat tattacctaa tggctaactt ggctgctgca gacttcttg ctgggttggtg ctacttctat ctcatgttca acacaggacc caatactcg agactgactg ttagcacatg gctcctgctg cagggcctca ttgacaccag cctgacggca tctgtggcca acttactggc tattgcaatc gagaggcaca ttacggtttt ccgcatgcag ctccacacac ggatgagcaa ccgcggggta gtgggtggtca ttgtggtcat ctggactatg gccatggtta tgggtgctat acccagtgtg ggctggaaact gtatctgtga tattgaaaat tgttcaaca tggcacccct ctacagtgc tcttacttag tcttctgggc cattttcaac ttggtgacct ttgtggtaat ggtggttctc tatgtctaca tctttggcta tgttcgccag agactatga gaatgctcg gcatagttct ggaccccgcc ggaatcgga taccatgat agtcttctga agactgtggt cattgtgctt ggggccttta tcatctgctg gactcctgga ttgggttttgt tacttctaga cgtgtgctgt ccacagtgcg acgtgctggc ctatgagaaa ttcttctctc ttcttctgta attcaactct	Homo sapiens

152	2976	Lysophosphat NP_001392.1 idic Acid Receptor Edg2	gcatgaacc ccatcattta ctctaccgc gacaaagaaa ttagcgccac ctttaggcag atcctctgct gccagcgag tgaagacccc accggcccca cagaaggctc agaccgctcg gcttcctccc tcaaccacac catcttggtt ggagttcaca gcaatgacca ctctgtggtt tagaacggaa actgagatga ggaaccagcc gtcctctctt ggaggataaa cagcctcccc ctacccaatt gccagggcaa ggtggggtgt gagaggag aagagcaac tcatgtactt aaacactaac caatgacagt attgttctt ggaccocaca agacttgata tatattgaaa attagcttat gtgacaaccc tcatcttgat cccatccctt tctgaaagta ggaagtggga gctcttgcaa tggaaattcaa gaacagactc tggagtgtcc atttagacta cactaactag acttttaaaa gattttgtgt ggtttgtgc aagtcagaat aaattctggc tagttgaatc cacaacttca ttatataca ggcttccctt tttattttt aaaggatacg ttccacttaa taaacacgtt tatgocctatc agcatgtttg tgaatgagta gactatggac tgcttttaaa ctaccataat tccatttttt ccttacata ggaactgtt aagttggaat tatctttgtt ttagaaaagca tgcattgtaatt gtagtgatgc agtagcctt acttaaaaaa attaaaaagga tactaatgtt aaatcttcta ggaatagaa cctagacttc aaagccagta tttgtttagg tcatgaagca acaaatgctc taatcacaaat attaatgtt taattaaaaa gttgtaacaa gtataaaca ggaatgtaa gtttattacc aagtgatat gtattccaaa aagtcatatg aagatgaagc actataatat ttttcccata tatttaaaat acccaagtac attctaatta ccagtataatc agaggaaaat tttcgtagtc tttgtaaaat aatatactca tcatagaaaa cttgaaaaat gcagaaaatgt ataaaaaagc aaaaatgatt actgataata tcacaaccca gaagtaacca cctttaaaaa ttgagtcata ctgtaaacag ttttataagt agatcttttt cattgcaaaa ttacataaat tcttatggc attaaaaat ttacaaaaac ataattttta tggctatat tattccatt taatggatgc aactcagttt atttaaacat tcccatgttg ttaactattt agttgttttc taattttcat tattataaag ttgcagaaat ttggtgt	Homo sapiens
153	3038	G Protein- Coupled Receptor MRG	IFIMLANLLV MVAIVNRRF EPQCFYNESI AFFYNRSKGH LATEWNTVSK LVMGLGITVC P WLLRQGLIDT SLTASVANLL AIAIERHITV FRMQLHTRMS NRRVVVVIV IWTMAIVMGA IPSVGNWCIC DIENCSNMAP LYSDSYLVFW AIFNLVTFV MVVLYAHIFG YVRQRTMRMS RHSSGPRRNR DTMSLLKTV VIVLGAFIIC WTPGLVLLL DVCCPQCDVL AYEKFFLLLA EFNSAMNPPII YSYRDKEMSA TFRQILCCQR SENPTGPTES SDRSASSLNH TILAGVHSND HSV tttgtattt gttgcacctt aagtctgttc atttcttct cctcagctga catttggagc A atagcagtcg atgatgccc cagacagact gcctgagact cagccctcg gagaaacgca gatttcctta ttttccaggt caagtcctgc cagccataga aaggacttct ttggtgccc ctgctgtgaa atgctgtgct tggaaatctc agtgcctcct tgtacctgtc tgaagccagg gaaatgccat actgtggcac tgcctgcatc tgcattgcta ccaagagatg cccaggactg gtttgaaaaga gatgagacat ggcaggtgc tgggtcaccg cttgtaatcc agcactttg gaggtcaagg cagtggatca caaggtcaga gttgagacca gccaggccaa tatggtgaaa acccatctc tactaaaaat acaaaaaat agccgggcaa tgggtgtggtg tgcctgtagt tccagctagt caggaggccg aggcaggaga atcgcttgaa cctgggaagt ggaggttcca gtgagctgag atcgcgccac tgcactccag cctgggtgac agagtgagac tccaactcaa	Homo sapiens

154	3038	G Protein- Coupled Receptor MRG	AAB21255.1	<p> aaaaaaaaa aaaaaagaga tgagacacta gtgtctcatg agtagaacct ggaccagaca  caaatctcca ttcccaatgt ttagtgctc attagtcccc aacaacaaga tattgggtct  atgtgggtag gcctggggca tcctgtacaa caggagatgt gtaggggag ggagaacaga  tcacaaatc atggagagct attgacagag cagatactcc catccactct gatattgagt  taatgttcag ctgttcttaa aaagcacacc caacaatggg tgttctattc cagctaggga  aaatgtagag gcaaggggtc tgaggccaga ggaccacct agatggacca ctgctcctga  atgtgatgt gtggcccact caggtcccag caccacctgt tctgggggaa aatttgctgg  ttcagccaga gggctggatg gacagtgtt cctgagtcac agatatctct ctcagttagc  ctttgtctcc acagtgtga ccaggaggca cagaacccaa acctggtatc tcagctctgt  ggcgtcttc ttcaaatga gacgaatga accatacata tgcagatgag catggcagtg  ggacagcagg cctgcccctt gaatactatt gcccacaagg ctgtgctggt ctccctctgt  gggtctttat tgaatggcac tgtcttctgg ctgctttgct gtggggccac gaatccctac  atggtataca tcctccacct ggtcgtgct gacgtgatct atctttgctg ctggcagtg  gggttcttac agtgactct gctaacttat catggagtcg tgttttttat cctgatttc  ctggccatat tgtctccctt ctctttgag gtgtgtctct gtctcctggt ggccatcagc  acagagcggg gtgtgtgtgt cctctcccc atctggtaca gatgccaccg cccaaatac  acatcataatg ttgtctgac cctcatctgg ggctgacct ttgcatcaa catagtaaaa  tcacttttcc taacttactg gaaacatgta aggcctatgt tcataattct aaagctttct  gggctcttcc atgtatctt ttcaacttgg atgtgtgtgt cgagtctgac tctactcatt  agattcctgt gctgctccca gcagcaaaa gcccacaggg tctatgcggt ggtgcagatc  tcggccccca tgttctctact ctggggcccta cccctgagcg tggcaccct cataacagat  ttcaaaaatgt ttgtcaccac ctctatttta attccttgt tctcattat aaacagcagc  gccaacccta tcattttatt ctttgtgggg agcctcagaa agaaaaggct gaaggaatct  ctcagagtga ttctccaaag ggcgttagca gataagccag aggtggggag gaacaaaaag  gcagctggca tcgacccaat ggagcaacca cacttactc agcatgtgga gaaccttct  cccagggagc acagggtcga tgtggaaca taatttccca catctgagct ggggaattgt  acacatagta accagcctg ttctgcatca taaggctgct gcatcaaatc aatgctttat  tctaataag ttcagcttcc atggacttcc aaaaacaccc ctgtgtgttt gtggttggaa  gagacattaa ctctctctct aggcagtaag cccagtttga atgtgtcca gtccaacga  tgaggggaat gggacccagt gagactttcc tggtaacctgt ggaatccaaa taaaagacct  acaaaggcat gaattc </p>	Homo sapiens
155	3057	Melanocortin 3 Receptor (MC3R)	NM_019888	<p> atgagcatcc aagaagta tctggaggga gattttgtct tctctgtgag cagcagcagc A  ttcctacgga cctgtgtgga gcccagctc ggatcagccc ttctgacagc aatgaatgct  tcgtgtctgc tgcctctctgt tcagccaaca ctgcctaagt gctcgaggca cctccaagcc </p>	Homo sapiens

156	3057	Melanocortin NP_063941.1 3 Receptor (MC3R)	<p> cctttcttca gcaaccagag cagcagcgcc ttctgtgagc aggtcttcat caagcccagag  atcttctctgt ctctgggcat cgtcagtcgt ctggaaaaa tcttggttat cctggcgtg  gtcaggaacg gcaacctgca ctccccgat tactctttc tctgcagcct ggcggtggcc  gacatgctgg taagtgtgtc caatgcccgt gagaccatca tgatgccat cgtccacagc  gactacctga ccttcgagga ccagtttacc cagcacatgg acaacatctt cgactccatg  atctgcatct ccttggtggc ctccatctgc aacctcctgg cctgcgcgt cgacaggtac  gtcaccatct tttacgcgct ccgtaccac agcatcatga ccgtgaggaa ggcctcacc  ttgatcgtgg ccatctgggt ctgctgcggc gtctgtggcg tgggtttcat cgtctactcg  gagagcaaaa tggatcatgt gtgcctcatc acctgttct tcgcatgat gctcctcatg  ggcaccctct acgtgcacat gttcctctt gcgcggtgc acgtcaagcg catagcagca  ctgccacctg ccgacggggt ggccccacag caacatcat gcatgaagg ggagtcacc  atcaccattc tcttgggcgt gttcatcttc tgttggggcc ctttcttct ccacctggtc  ctcatcatca cctgccccac caacctctac tgcattctgt acactgccc cttcaacacc  tacctggctc tcatcatgtg caactcgtc atcgacccac tcatctacg tttccggagc  ctggaattgc gcaacacctt tagggagatt ctctgtggct gcaacggcat gaacttggga  tag </p>	Homo sapiens
157	3058	Melanocortin NP_005912 4 Receptor (MC4R)	<p> MSIQKKYLEG DFVFPVSSSS FLRTLLEPQL GSALLTAMNA SCCLPSVQPT LPNGSEHLQA P  PFFSNQSSA FCEQVFIKPE IFLSLGIVSL LENILVTILAV VRNGNLHSPM YFFLCSLAVA  DMLVSVSNAL ETIMIAIVHS DYLTFFEDQFI QHMDNIFDSM ICISLVASIC NLLAIAVDYR  VTIFYALRYH SIMTVRKALT LIVAIWVCCG VCGVVFIVYS ESKMVIVCLI TMFFAMMLLM  GTLVHMFLE ARLHVKRRIA LPPADGVAPQ QHSCMKGAVT ITILLGVFIF CWAPFFLHLV  LIITCPTNPY CICYTAHENT YLVLMCNVS IDPLIVAFRS IELRNTFREI LCGNGMNLG  atggtgaact ccaccacccg tgggatgcac acttctctgc acctctgaa ccgcagcagt A  tacagactgc acagcaatgc cagtgaagtc cttggaaaag gctactctga tggagggtgc  tacgagcaac ttttctctc tcttgaggtg tttgtgactc tgggtgtcat cagcttgttg  gagaatatct tagtgattgt ggcaatagcc aagaacaaga atctgcattc acccatgtac  ttttcatct gcagcttggc tgtggctgat atgctggta gcgtttcaaa tggatcagaa  accattatca tcacctatt aacagtagta gatacggatg cacagagtgt cacagtgaat  attgataatg tcattgaactc ggtgatctgt agctccttgc ttgcattccat ttgcagcctg  ctttcaattg cagtggacag gtactttact atcttctatg ctctccagta ccataacatt  atgacagtta agcgggttgg gatcatcata agttgtatct gggcagcttg cagggtttca  ggcattttgt tcatcattta ctcatagatg agtgcgtgca tcatctgcct catcaccatg  ttcttcacca tgcctgctct catggcttct ctctatgtcc acatgttctt gatggccagg  cttcacatta agaggattgc tgcctctccc ggcactgggt ccatccgcca aggtgccaat  atgaaggagg cgattacctt gaccatctct attggcgtct ttgttgtctg ctgggccccca  ttcttctctc acttaaatatt ctacatctct tgcctcctcaga atccatattg tgtgtgcttc  atgtctcact ttaacttgtta tctcactatg atcatgtgta attcaatcat cgatecctctg  atttatgcac tccggagtca agaactgagg aaacacctca aagagatcat ctgttgctat  cccctgggag gcctttgtga cttgtctagc agatattaa  cccttgggag gctttgtgta cttgtctagc agatattaa </p>	Homo sapiens
158	3058	Melanocortin NP_005903.1 4 Receptor	<p> ENILVIVVIA KKNLHSPMY FFICSLAVAD MLVSVSNGSE TIIITLINST DTDAQSFTVN  YEQLFVSPEV FVTILGVISLL P </p>	Homo sapiens

(MC4R)								

162	3061	Melanocortin NP_002377.2 1 Receptor (MCLR)	LGSLNSTPTA IPQLGLAANQ TGAARCLEVSI SDGLFLSLGL VSLVENALVW P ATIAKNRNLIH SPMYCFICCL ALSDLLVSGS NVLETAVILL LEAGALVARA AVLQQLDNVI DVITCSSMLS SLCLGAIIV DRYISIFYAL RYHSIVTLPR ARQAVAAIWV ASVVFSTLFI AYYDHVAVLL CLVFFFLAML VLMVLYVHM LARACQHAQG IARLHKRQRP VHQGFGLKGA VTLTLLGIF FLCWGPFFLIH LTLVLCPEH PTCGCIKFNF NLFLALIICN AIIDPLIYAF HSQELRRLK EVLTCSW	Homo sapiens
163	3079	Melatonin Receptor type 1a	cgggcgagc cttaacaagt ggtcggggcg gggacgaggg cgggcgatgg ccctggggcc A gggacggaa cagggaccat gcagggaac gcagagcgcg tgcccaacgc ctccagagccc gtgctccgg gggacggcg cggccctcg cggccctcg tgcctcctgc ctccagagccc atcttcaaca tcgtgtgtga cactcctggc aactcctggc tcactcctgc ggtgtatcgg aacaagaagc tcaggaaacg aggaacatc cccgttggcg ctgatgtcga tattaacaa cgggtggaac gtggtggcca ttatccgta cccgttggcg ttcctgatgg gcctgagcgt catcggtccc ctgggctatc tgcaactgca agcactgac cgcactgac cgtactgct acatcgcca cagtcctcag atattcaaca tcacgggcat caagaactcc cctgtctacg tgctcctcat atggtcctcg tacgacaaac tgtacagcag caagaactcc caactcctg gcaggagactc tccagtagca cccagagatc acgtggcgcg ccgtcctgcc cctcctcgc gtcctcgcg tccgcctaca ccctgccttc ggtggttttc tactcgtgca ccttcgcca tcccatgat catagtcatc ttctgttacc tgagaatatg gatcctggtt cacttccctg tcccatgat gaaacctgac gaaacctgac aactgaaacc acaggacttc ctccaggtca gacagaggtt gaaacctgac gaaacctgac gaaacctgac gaaacctgac aggaatttgc tccatgtgtt ggtgtgttgc ggtgtgttgc ggtgtgttgc ggtgtgttgc aacttcattg gcttgccgtt ggtgtgttgc ggtgtgttgc ggtgtgttgc ggtgtgttgc tggtgttgc ggtgtgttgc ggtgtgttgc ggtgtgttgc ggtgtgttgc ggtgtgttgc tacgggctac tgaacacaaa tttcagggaag gaaacagga gaattatagt ctgctctgt acagccaggg ggtcttctgt ggacagctct aacgacgtgg ccgatagggt taaatggaaa ccgtctccac tgatgaccaa caataatgta gtaaatggtg actccgttta aaaaagcacc acgttccggg tgagatggac acgtcgcgca aggtcctgct cttgacagat gctgggaaa gcagagtgtt ggaggaaact tccaactttt acctggctgc tgccatagtt tctgagctaa cgtgctgtca gcattataaa cccctccaat ctactagtca agagaagtag agaatgtatg gagagttaca tgttaactga ggaatgcggt tcagggtcgtg ggtgagagta agctgctgaa tgcatccagg ggaaggagtg tgcaaaactt tattgtaaat ggtgccaca aaaggggtaa ttgcatctct ctcaactttt tgaagacttc tagcagaaaa atgaagaga atttattta taaatgagca aatggaacaa ttttttttct gtaaatggaa caaacaatga aagtggggtg agtgcctctt attacagagg gaaaggctga acataaatca gttaatggct catcaacaat	Homo sapiens



164	3079	Melatonin Receptor type 1a	NP_005949.1	<p>cacaaccaca accaacacca caaacctttc agctggcaga gttagcattg ggtagctata ctcatgggtca taaatgtttg ccgtctcata ttacaagtgg tgcatgcaac cagataaaga actaaatcat agcccggtgca cagtcgctca cacctgtaac ctacgacatt tgggaggctg aggtgggcag atcaactgag ttacaggagt ttgagaccac ctggggcaac atgatgaaat cccatctcta aaaaaatata aaaaattatc tgggcatggg gcacacgcct gtaatcccag ctactcagga gactgagtta ggagaatccc ttgagcccca gaggcagagg ttgtggtgag ccgagatcgc gccagtacat tccaaacttag gctacagaat gagactctgc ccaaaaaaaa aaaaaaaa</p>	Homo sapiens
165	3080	Melatonin Receptor type 1b	NM_005959	<p>AGNIFWVSLA VADLVVAIYP YPLVLMISFN NGWNLGYLHC QVSGFLMGLS VIGSIFNITG IAINRYCYIC HSLKYDKLYS SKNSLCYVLL IWLLTLAAVL PNLRAGLIQY DPRIYSCTFA QSVSSAYTIA VVVEHFLVPM IIVIFCYLRI WILVLQVRQR VKPDRKPKLK PQDFRNFVTM FVVEVLEAIC WAPLNFILGLA VASDPASMVP RIPEWLFVAS YMYAFNSCL NAIYGLLNQ NERKEYRRII VSLCTARVFF VDSNDVADR VKWKPSPIMT NNNVVKVDSV</p> <p>acgcgagctg ggcagggaag agagcgcccg gctcagtaact gcgcgcgcgc tgcggctgtc cggggcccgc cggtggccaa agcacagcgc gggagagtct gcgatgtcag agaacggctc cttcgccaac tgcgcgagg cggcggggtg ggcagtcgc cgggctggt cgggggctgg cagcgcgcgc ccctccagga ccctcgacc tccctgggtg tctccagcgc tgcgcgcgtg gctcatcgtc accacgcgc tggacgtcgt gggcaacctc ctggtgaccc tctccgtgct caggaaccgc aagctccgga acgcaggtaa ttgttcttgg gtgagtcctg cattggctga cctggtggtg gccttctacc cctaccgct aatcctcgtg gccatcttct atgacggctg ggccctgggg gaggagcact gcaaggccag cgcttcttgg atgggacctg gcgtcatcgg ctctgtcttc aatatcactg ccctcgccat taaccgtac tgctacatct gccacagcat ggcctaccac cgaatctacc ggcgtgggca caccctctg cacatctgc tcatctggct cctcacctg gtggccttgc tgcccaactt ctttgtgggg tccctggagt acgacccacg catctattcc tgcaccttca tccagaccgc cagcacccag tacacggcgg cagtgggtgt catccacttc ctctcccta tgcgtgtcgt gtccttctgc tacctgcgca tctgggtgct ggtgcttcag gccgcagga aagccaagcc agagagcagg ctgtgcctga agccagcga cttgcgagc tttctaacca tgttgttgtt gtttgtgac ttgtccatct cgtgggctcc acttaactgc atcgccctcg ctgtggccat caaccccca gaaatggctc ccagatccc tgaggggcta ttgtcacta gctacttact ggcttattc aacagctgc tgaatgccat tgtctatggg ctcttgaacc aaaacttcg cagggaatac aagaggatcc tcttgccct ttggaaccca cggcactgca ttcaagatgc ttccaaggc agccacgcg aggggctgca gagccagct ccaccatca ttggtgtgca gcaccaggca gatgtctct agcctggatc tgaggcacac cagcagcatg acaactcat gaaatggtgg gagagagtct gctgcaaggg tgagaccagg cagcctgctg gcccacactg tctgttggc atcacagccc caaggctggg ggaacttcat gctgggacaa gcagcccatc aacgccatgg gttcaggctg atccaggaga tgctcacagg ccacaggacc tggaaaaaac tcttggtgtt gcttgggga ttgtgtgac acaagaccaa ggaaggaca gaatgaggaa aggcctgggg cagaagagcc caactcctc tcatagctga cctcatcct cctgccttgg cctcttctt gcttctccc ctccccca gcattggcagg atctcttctt gttagcaagg atgaaagaga gaggctcagta ggactggaac</p>	Homo sapiens

166	3080	Melatonin Receptor type 1b	NP_005950.1	<p>ttggttaacta caagggcctc aggtggggca ggtgcagagg gc  MSENGSFANC CEAGGWAVRP GWSGAGSARP SRTPRPPWVA PALSAVLIVT TAVDVVGNLL P  VILSVLRNRK LRNAGNLFLV SLALADLVVA FYPYPLILVA IFYDGWALGE EHCKASAFVM  GLSVIGSVFN ITAIINRYC YICHSMAYHR IYRRWHTPLH ICLIWLLTVV ALLENFFVGS  LEYDPRIYSC TFIQTASTQY TAAVVVIHFL LPIAVVVSFCY LRIWLVLOA RRAKAPESRL  CLKPSDLRSF LTMFVWFVIF AICWAPLNCI GLAVAINPQE MAPQIPEGLF VTSYLLAYFN  SCLNAIVYGL LNQNFREYK RILLALWNPR HCIQDASKGS HAEGLOSPAP PIIGVQHQAD  AL</p>	Homo sapiens
167	3081	Melatonin- Related Receptor	NM_004224	<p>gttttgctgt ctggacctgg ctgctgatcc tgagcctgct gggagatctt aacgatcccc A  aggagcaaca tggggccac cctagcgggt cccacccct atggctgtat tggctgtaag  ctacccagc cagaataccc accggctcta atcatcttta tgttctgcgc gatggttacc  accatcggtg tagacctaat cggcaactcc atggctcatctt tggctgtgac gaagaacaag  aagctccgga attctggcaa catcttcgtg gtcagtcctc ctgtggccga tatgctggtg  gccatctacc catacccttt gatgctgcat gccatgtcca ttgggggctg ggatctgagc  cagttacagt gccagatggt cgggttcac acagggctga gtgtggctgg ctcaccttc  aacatcgtag caatcgctat caaccgttac tgctacatct gccacagcct ccagtacgaa  cggatcttca gtgtgcgcaa tacctgcac tacctggtca tcacctggat catgaccgtc  ctggtgtcc tggccaaact gtacattggc accatcgagt acgatccctg caccacacc  tgcatcttca actatctgaa caaccctgtc ttcactgtta ccatcgtctg catccactc  gtcctccctc tctcatcgt gggtttctgc tactgagga tctggacca agtgcctggg  gccgtgacc ctgcaggga gaatcctgac aaccaacttg ctgaggttcg caatttcta  accatgtttg tgatcttct cctctttgca gtgtgctggt gccctataca cgtgctcact  gtcttggtgg ctgtcagtc ccagagagatg gcaggcaaga tccccaaactg gctttatctt  gcagcctact tcatagccta ctcaacagc tgcctcaacg ctgtgatcta cgggctcctc  aatgagaatt tcggaagaga atactggacc atcttccatg ctatgaggca ccctatcata  ttcttccctg gctcatcag tgatattcgt gagatgcagg aggcccgtag cctggcccg  gccgtgccc atgtctgcga ccaagctcgt gaacaagacc gtgcccagtc ctgtcctgct  gtggaggaaa ccccgatgaa tgtccggaat gttccattac ctggtgatgc tgcagctggc  caccgcgacc gtgcctctgg ccaccctaag ccccatcca gatcctcctc tgcctatcgc  aaatctgcct ctaccacca caagtctgtc tttagccact ccaaggctgc ctctggtcac  ctcaagcctg tctctggcca ctccaagcct gcctctggtc acccaagtc tgccactgtc  taccctaagc ctgctctgt ccatttcaag ggtgactctg tccatttcaa ggtgactct  gtccatttca agcctgactc tgttcatttc aagcctgctt ccagcaaccc caagcccatc  actggccacc atgtctctgc tggcagccac tccaagtctg ccttcagtgc tgcaccagc  caccctaaac ccatcaagcc agctaccagc catgtcgagc ccaccactgc tgactatccc  aagcctgcca ctaccagcca ccctaagccc gctgctgctg acaaccctga gctctctgcc  tccattgccc ccgagatccc tgccattgccc caccctgtgt ctgacgacag tgacctccct  gagtcggcct ctagccctgc cgctggggccc accaagcctg ctgccagcca gctggagctc  gacaccatcg ctgaccttcc tgacctact gtgtgacta ccagtaccaa tgattaccat  gatgtcgtgg ttgttgatgt tgaagatgat cctgatgaaa aaaaatgctc  tcgtagggtg ccaggcagt</p>	Homo sapiens

168	3081	Melatonin- Related Receptor	NP_004215.1	MGPTLAVPTP YGCIGCKLPQ YCIGCKLPQ PEYPPALLIF MFCAMVITIV VDLIGNSMVI LAVTKNKKLR P NSGNIFVVS L SVADMLVAIY PYPLMLHAMS IGGWDLSQLQ CQMVGFITGL SVVGSIFNIV AIAINRYCYI CHSLQYERIF SVRNTCIYLV ITWIMTVLAV LPNMYIGTIE YDPRTYTCIF NYLNNPVFTV TIVCIHFVLP LLIVGFCYVR IWTKVLAA RD PAGQNPQNQL AEVRNFLTME VIFLEAVCW CPINVLTVLV AVSPKEMAGK IPNWLILAA Y FIAYENSCLN AVIYGLNLN FRREYTWIFH AMRHPIIFFP GLISDIREMQ EARTLARARA HARDQAREQD RAHACPAVEE TPMNVVRNPL PGDAAAGHPD RASGHPKPHS RSSAYARKSA STHKSVFESH SKAASGHLKP VSGHSKPASG HPKSATVPK PASVHFKGDS VHFKGDSVHF KPDSVHFKPA SSNPKPITGH HVSAGSHSKS AFSAAATSHPK PIKPATSHAE PTTADYPKPA TTSHPKPAAA DNPELSASHC PEIPAIAPV SDDSDLPESA SSPAAGPTKP AASQLES D TI ADLPDPTVVVT TSTNDYHDVV VVDVEDDDE MAV	Homo sapiens
169	3093	Metabotropic Glutamate Receptor 1	NM_000838	gaattccctt acaaacgcct ccagcttgta gaggcggtcg tggaggagacc agaggaggag A acgaaggagg agaggcggt ggtggaggag gcaaaaggcct tggacgacca ttgttggcga ggggcaccac tccgggagag gggcgctgg gcgtcttggg ggtgcgcgc gggagcctgc agcgggacca gcgtgggaac gggctggga ggtgtggac ctctctctca ccaccatggt cgggctcctt ttgtttttt tccagcgat ctttttggag gtgtcccttc tcccagaag ccccggcagg aaagtgtgc tggcaggagc gtctgtcag cgtcgttgg ccagaatgga cggagatgtc atcattggag cctcttctc agtccatcac atccagagg tggaggccat gcccagagg aagtgtggg agatcaggga gcagtatggc atccagagg atccagggc gttccacacg ttggataaga tcaacgcgga ccggtctctc ctgcccaca tcacctggg cagtgagatc cgggactcct gctggcactc ttccgtggct ctggaacaga gcattgagt cattaggag tctctgatt ccattcgaga tgagaaggat gggatcaacc ggtgtctg tgacggccag tccctcccc caggcaggac taagaagccc attgcgggag tgatcggtc cggctccagc tctgtagcca ttcaagtga gaacctgtc cagctcttc acatccccc gatcgcttat tcagccaca ccatcgacct gactgacaaa actttgtaca aatacttct gagggtgtc ccttctgaca ctttgcaggc aaggcccatg cttgacatag tcaaacgtta caattggacc tatgtctctg cagtcacac cagtcacac ggaagggaat tatggggaga gcggaatgga cgctttcaaa gagctggctg cccaggagg cctctgtatc gccattctg acaaatcta cagcaacgct ggggagaaga gctttgaccg actcttgccg aaactccgag agaggcttc caaggctaga gtgtgtgtct gcttctgtga aggcattgaca gtgcaggac tctgagcgc catgcggcgc cttggcgtcg tggcgaggt ctcactcatt ggaagtgat gatgggcaga cagagatgaa gtcattgaag gttatgaggt ggaagccaac gggggaatca cgataaagct gcagtctcca gaggtcaggt catttgatga ttatttctg aaactgaggc tggacactaa cacgaggaat cctgtgtcc ctgagttctg gcaacatcgg tccagtgcc gcctccagg acaccttctg gaaaatcccc actttaaacg aatctgcaca ggcaatgaaa gcttagaaga aaactatgtc caggacagta agatggggtt tgtcatcaat gccatctatg ccatggcaca tgggctgcag aacatgcacc atgccctctg ccttgccac gtggcctct gcgatgccat gaagcccatc gacggcagca agctgctgga ctctctcatc aagtcctcat tcattggagt atctggagag gaggtgtggt ttgatgaga aggagcgt cctggagggt atgatcatc gaatctgcag tacactgaag ctaatcgcta tgactatgtg cacgttgga cctggcatga aggagtgtc aacattgatg attacaaaat ccagatgaac aagatggag tggtcggtc	Homo sapiens

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[illegible]

172	3094	Metabotropic Glutamate Receptor 2	NP_000830.1	<p>aggtcgcgtt tgaccgcgtt ggtgatgga ttggccgcta caacatcttc acctatctgc  gtgcaggcag tgggcgctat cgctaccaga agtgggcta ctgggcagaa gcttgactc  tggacaccag cctcatccca tgggcctcac agtcagccgg cccctggcc gctctcgt  gcagtggcc ctgctccag aatgaggtga agagtgtga gccgggcgaa gtctgctgct  ggctctgcat tccgtgccag cctatgagt accgattgga cgaattcact tgcgctgatt  gtgacctggg ctactggccc aatgccagc tgaactgctg cctcgaactg cccaggagt  acatccgtg gggcgatgcc tgggctgtg gacctgtcac catcgccctg ctcgggccc  tggccacct gttgtgctg ggtgtctttg tgggcacaa tgccacacca ctggtcaagg  ctcaggctg ggagctctg tacatccctg tgggtgtgt cttcctctgc tactgcatga  ccttcattt cattgccaag ccatccacgg cagtgtgtac cttacggcgt cttggtttg  gcactgcct ctctgtctg tactcagccc tgctaccaa gaccaaccg attgcacgca  tcttcggtg ggcggggag ggtgccacg gccacgctt catcagtcct gcctcacagg  tggccatctg cctggcactt atctcgggc agctgtcat cgtggtcgc tggctggtg  tggaggcacc gggcacaggc aaggagacag ccccgaaac gcgagggtg gtgacactgc  gctgcaacca cgggatgca agtatgttg gctcgtggc ctacaatgtg ctctcatcg  cgctctgac gcttatgct tcaatactc gcaagtgcc cgaatactt aacgaggcca  agttcattg ctccaccatg tacaccacct gcatcattg gctggcattg ttgcccatt  tctatgtcac ctccagtgac taccgggtac agaccacac catgtgcgtg tcagtcagcc  tcagcgctc cgtgtgctt gctgctctt tgggcccac gctgcacatc atctcttcc  agcgcagaa gaactggtt agccacggg caccacacag cgccttggc agtgcgtg  ccagggccag ctccagcct ggccaaagg cttgctccca gttgtcccc actgtttgca  atggcctga ggtgtggac tcgaacgt catgctttg a</p>	Homo sapiens
173	3095	Metabotropic Glutamate Receptor 3	NM_000840	<p>MGSLALLAL LPLGVAEG PAKKVLTEG DLVLGLFPV HQKGGPAEDC GPNNEHRGIQ P  RLEAMLFALD RINRDHLLP GVRLGAHILD SCSKDTHALE QALDFVRASL SRGADGSRHI  CPDGSYATHG DAPTAITGVI GGSYSDVSIQ VANLLRLFQI PQISYASTSA KLSDKSRDYD  FARTVPPDFF QAKAMAEILR FENWTYVSTE ASEG DYGETG IEAFELEARA RNICVATSEK  VGRAMSRAAF EGVVRALIQLK PSARVAVLFT RSEDARELLA ASQRLNASFT WVASDGGAL  ESVAGSEGA AEGAITIELA SYPISDFASY FQSLDPWNS RNPWFREFWE QRFRCSFRQR  DCAAHSLRAV PFEQESKINF VNAVYAMAH ALHNMHRALC PNTRLCDAM RPVNGRRLLYK  DFVLNVKFDA PFRPADTHNE VRFDRFGDI GRYNIFTYLR AGSGRYRYQK VGYWAEGLTL  DTSLLPWASP SAGPLAASRC SEPCLQNEVK SVQPGEVCCW LCIPCQPYEY RLDEFTCADC  GLGYWPNASL TGCFLPQEY IRWGDWAVG PVTIACLGAL ATLFLGVFV RHNATPVVKA  SGRELICYILL GGVFLCYCMT FIFIAPSTA VCTLRLGLG TAFSVCYSAL LTKTNRIARI  FGGAREGAQR PRFISPASQV AICLALISGQ LLIVAVLVV EAPGTGKETA PERREVTLR  CNHRDASMLG SLAYNVLLIA LCTLYAFNTR KCPENFNEAK FIFTMYTTC IWLALLPIF  YVTSSDYRVQ TTTMVCVSLSL SGSVVLGCLF APKLHIILFQ PQKNVVSHRA PTSRFGSAAA  RASSSLGQGS GSQFVPTVCN GREVVDSTTS SL</p>	Homo sapiens

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174	3095	Metabotropic NP_000831.1 Glutamate Receptor 3	<p> tgtttgtttg caccgaaggt tcacatcatc ctgttttcaac ccagaagaa tggtgtcaca  cacagactgc acctcaacag gttcagtgct agtggaactg ggaccacata ctctcagtc  tctgcaagca cgtatgtgcc aacggtgtgc aatgggaggg aagtcctcga ctccaccacc  tcactctgtg gattgtgaat tgcagttcag ttcttgtgtt ttagactgt tagacaaaag  tgctcacgtg cagctccaga atatggaaac agagcaaaa acaacccta gtaccttttt  ttagaaaacag tacgataaat tatttttgag gactgtatat agtgaatgac tagaactttc  taggtgagtg ctagtgtccc tattattaac aattccccca gaacatggaa ataaccattg  tttacagagc tgagcattgg tgacaggtgc tgacatgggc agtctactaa aaaaacaaaa  aaaaaaacaa aaaaaaaa acaaaagaaa aaaaataaaa tacgggtggca atattatgta  accttttttc ctatgaagtt tttgtaggt ccttgttgtg actaatgtg gatgagtttc  tatgttgtat attaaagtta cattatgtgt aacagattga ttttctcagc aaaaataaaa  aagcatctgt attaatgtaa agatactgag aataaaacct tcaaggtttt  MLTRIQVLT ALFSKGFLS LGDHNFLRRE IKIEGDLVIG GLFPINEKGT GTEECGRINE P  DRGIQRLEAM LFAIDEINKD DYLLPGVKLG VHILDTCSRDL TYALEQSLEF VRASLTQVDE  AEYMCPLDGSY AIQENIPLLI AGVIGGSYS VSIQVANLLR LFQIPQISYA STSAKLSDKS  RYDYFARTVP PDFYQAKAMA EILRFENWTY VSTVASEGDY GETGIEAFEQ EARLNICIA  TAEKVGRSNI RKSYSVIRE LLQPNARVV VLFMRSDDSR ELIAAASRAN ASFTWVASDG  WGAQESIIG SEHVAYGAI LELASQPVQ FDRYFQSLNP YNNHRNPWR DFWEQKFQCS  LQNKRNHRRV CDKHLAIDSS NYEQESKIMF VNNAVYAMAH ALHKMQRTLC PNTTKLCDAM  KILDGKKLYK DYLLKINFTA PFNPNKDADS IVKFDTEGDG MGRYNVENFO NVGKYSYLK  VGHWAETLSL DVNSIHWARN SVPTSQSDP CAPNEMKNMQ PGDVCCWICI PCEPYEVLAD  EFTCMDCGSG QWPTADLTGC YDLPEDYIRW EDAWAIGPVT IACLGFMCTC MVTVFIKHN  NTPLVKASGR ELCYILLFGV GLSYCMTFFF IAKPSPVICA LRLGLGSSF AICYSALLTK  TNCIARIFDG VKNGAQRPKF ISPSSQVFIC LGLILVQIVM VSWLILEAP GTRRYTLAEK  RETVILKCNV KDSSMLISLT YDVILVILCT VVAFTRKCP ENFNEAKFIG FTMVTTCLIW  LAFLPIFYVT SSDYRVQTTT MCISVSLSGF VVLGCLFAPK VHIILFQPK NVVTHRLHLN  RFSVSGTGT YSQSSASTYV PTVCNGREVL DSTSSL </p>	Homo sapiens
175	3096	Metabotropic NM_000841 Glutamate Receptor 4	<p> ccgagtgaca aggaagtggtg agagggtagc agcatgggct acgcggttgg ctgccctcag A  tccccctgct gctgaagctg cctgcccac gccaccccag gccgtggggc caggggcctg  ccagggctag gagtgggcct gccgttcctg ggtctctagg gatttccgag atgcctggga  agagaggctt gggctggtgg tggggccggc tgcccccttg cctgctcctc agcctttacg  gccccggat gccttccctc ctgggaaagc ccaaaaggcca cctcacatg aattccatcc  gcatagatgg ggacatcaca ctgggaggcc tgttcccggt gcatggccgg ggctcagagg  gcaagccctg tggagaactt aagaaggaaa agggatccca ccggctggag gccatgctgt  tgccccgga tgcacatcaac aacgaccccg acctgctgcc taacatcacg ctgggcgccc  gcattctgga cactgctcc agggacaccc atgccccga gcagtgcctg acctttgtgc  aggcgctcat cgagaaggat ggacacagag tccgctgtgg cagtgccggc ccacccatca  tcaccaagcc tgaacgtgtg gtgggtgtca tgggtgtctc agggagctcg gtctccatca  tgggtggccaa catccttcgc ctcttcaaga taccacagat cagctacgcc tccacagcgc  cagacctgag tgacaacagc cgctacgact tcttctccc cgtgggtgccc tcggacacgt  accaggccca ggccatgggtg gacatcgtcc gtgccctcaa gtggaactat gtgtccacag </p>	Homo sapiens

tgccctcgga gggcagctat ggtgagagcg gtgtgagggc cttcatccag aagtcccggtg  
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tggaggaggt ggtgaggggt gctgtcacga tcttcccaa gaggatgtcc gtacgaggt  
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cccagctgct taagtacatc cgaacgtca acttctcagg catcgcagg aacctgtga  
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tctcgtgtgag tctgagcgc tcggtgtccc tgggaatgct ctacatgccc aaagtctaca  
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tcaactgctg cagcctggg aaaccgggtg agcaacagga ggcgagggg ccggggcggt  
gccaggctac cacaagaacc tgcgtcttgg accttgccc ctccggccc caaacacag  
gggctcaggt cgtgtgggccc ccagtgctag atctctccc cctctgctct ctgtctgtgc  
tgttgcgac cctctgtct gtctccagcc ctgtctttct ctctttgttt

176	3096	Metabotropic NP_000832.1 Glutamate Receptor 4	<p> caccctttcc ctctctggcg tccccggctg cttgtactct tggccttttc tgtgtctcct  ttctggctct tgcctccgcc tctctctctc atcctctttg tccctcagctc ctctcgcttt  cttgggtccc accagtgtca cttttctgcc gttttctttc ctgttctcct ctgttctcatt  ctcgtccagc cattgctccc ctctccctgc caccctccc cagttcacca aacctacat  gttgcaaaag agaaaaaggt aaaaaaatc aaaaacaaaa aaagccaaaa cgaacaaaa  tctcgagtgt gttgccaagt cctgctctct cctggtggcc tctgtgtgtg tccctgtggc  ccgcagcctg cccgcctgcc ccgcccctct cccgtgtgtc ttgcccgcct gccccgccg  tctgcccgtct gtcttgcccg cctgcccgcg tgcctcctct gccgaccaca cggagttcag  tgcctgggtg tttgtgtgat gttattgacg acaatgtgta gcgcatgatt gttttatac  caagaacatt tctaataaaa ataaacacat ggttttgcac aaaa  MPGKRGGLGWW WARLPLCLLL SLYGPMWPS LGKPKGHPHM NSIRIDGDI LGLFPVHGR P  GSEKPCGEL KKEKGIHRL AMLFALDRIN NDPDLLPNIT LGARILDTC RDTHALEQSL  TFVQALIEKD GTEVRCGSGG PPIITKPERV VGVIGASGSS VSIMVANILR LFKIPQISYA  STAPDLSDNS RYDFFSRWVP SDTYQAQAMV DIVRALKNY VSTVASEGSY GESGVEAFIQ  KSREDGGVCI AOSVKIPREP KAGEFDKIR RLETSNARA VIIFANEDDI RRVLEARRA  NQTHFFWMG SDSWGSKIAP VLHLEVAEG AVTILPKRMS VGFDRYFSS RTLDNNRRNI  WFAEFWEDNF HCKLSRHAK KGSVKKCTN RERIGQDSAY EQEGKVQFVI DAVYAMGHAL  HAMHRDLCPG RVGLCPRMDP VDGTLKLYI RVNWFSGIAG NPVTENENG APGRYDIQY  QLRNDSEAYK VIGSWTDHLH LRIERHWPV SGOQLPRISIC SLPCQPGERK KTVKGMPCW  HCEPCTGYOY QVDRYCTKC PYDMRPTENR TGRPIPIIK LEWSPWAVL PLFLAVVGLA  ATLFVITFV RYNDPIVKA SRELSYVLL AGIFLCYATT FLMAEPDLG TCSLRRIFLG  LGMSISYAAL LTKNRIYRI FEQGRSVSA PRFISPASQL AITFSLISLQ LLGICVWFVV  DPHSVVDFO DQTLDPFRA RGVLCDDISD LSLICLLGYS MLLMVTCTVY AIKTRGVPEP  FNEAKPIGFT MYTTCIVWLA FIPIFFGTSQ SADKLYIQT TLTVSLSLSA SVSLGMLYMP  KVYIILFHE QNVPRKRKRSI KAVVTAATMS NKFTQKGNR PNGEAKSELC ENLEAPALAT  KQTYVTYNH AI </p>	Homo sapiens
177	3097	Metabotropic NM_000842 Glutamate Receptor 5	<p> acaaaatggt ccttagaaa atacatctga atgtctggct aatttcttga tttgcgactc A  aacgtaggac atcgcttgtt cgtagctatc agaaccctcc tgaattttcc ccaccatgct  atctttattg gcttgaactc ctttccctaaa atggtctctc tgttgatcct gtcagtctta  cttttgaag aagatgtccg tgggagtgca cagtcagtg agaggaggt ggtggctcac  atgccgggtg acatcattat tggagctctc tttctcttcc atcaccagcc tactgtggac  aaagttcatg agaggaagtg tggggcggtc cgtgaacagt atggcattca gagagtggag  gccatgctgc atacctgga aaggatcaat tcagacccca cactcttgcc caacatcaca  ctgggctgtg agataagggga ctctgctggt cattcggtg tggccctaga gcagagcatt  gagttcataa gagattccct catttcttca gaagaggaag aagccttggt acgctgtgtg  gatggctcct cctcttctt ccgctccaag aagcccctag taggggtcat tgggctggc  tccagttctg tagccattca ggtccagaat ttgctccagc ttttcaacat acctcagatt  gcttactcag caaccagcat ggatctgagt gacaaagctc tgttcaataa tttcatgagg  gttgtgcctt cagatgtctca gcaggcaagg gccatggtgg acatagttaa gaggtacaa  tggacctatg tatcagccgt gcacacagaa ggcaaatatg gagaaagtgg gatggaagcc  ttcaaaagata tgcagcgaa ggaaggaggt tgcctcgccc actcttaca aatctacagt </p>	Homo sapiens

aatgcagggg agcagagctt tgataagctg ctgaagaagc tcacaagtca cttgcccaga  
gcccgggtgg tggcctgctt ctgtgagggc atgacgggtga gaggtctgct gatggccatg  
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178	3097	Metabotropic NP_000833.1	Glutamate Receptor 5	3098	3099	3100	3101	3102	3103	3104	3105	3106	3107	3108	3109	3110	3111	3112	3113	3114	3115	3116	3117	3118	3119	3120	3121	3122	3123	3124	3125	3126	3127	3128	3129	3130	3131	3132	3133	3134	3135	3136	3137	3138	3139	3140	3141	3142	3143	3144	3145	3146	3147	3148	3149	3150	3151	3152	3153	3154	3155	3156	3157	3158	3159	3160	3161	3162	3163	3164	3165	3166	3167	3168	3169	3170	3171	3172	3173	3174	3175	3176	3177	3178	3179	3180	3181	3182	3183	3184	3185	3186	3187	3188	3189	3190	3191	3192	3193	3194	3195	3196	3197	3198	3199	3200	3201	3202	3203	3204	3205	3206	3207	3208	3209	3210	3211	3212	3213	3214	3215	3216	3217	3218	3219	3220	3221	3222	3223	3224	3225	3226	3227	3228	3229	3230	3231	3232	3233	3234	3235	3236	3237	3238	3239	3240	3241	3242	3243	3244	3245	3246	3247	3248	3249	3250	3251	3252	3253	3254	3255	3256	3257	3258	3259	3260	3261	3262	3263	3264	3265	3266	3267	3268	3269	3270	3271	3272	3273	3274	3275	3276	3277	3278	3279	3280	3281	3282	3283	3284	3285	3286	3287	3288	3289	3290	3291	3292	3293	3294	3295	3296	3297	3298	3299	3300	3301	3302	3303	3304	3305	3306	3307	3308	3309	3310	3311	3312	3313	3314	3315	3316	3317	3318	3319	3320	3321	3322	3323	3324	3325	3326	3327	3328	3329	3330	3331	3332	3333	3334	3335	3336	3337	3338	3339	3340	3341	3342	3343	3344	3345	3346	3347	3348	3349	3350	3351	3352	3353	3354	3355	3356	3357	3358	3359	3360	3361	3362	3363	3364	3365	3366	3367	3368	3369	3370	3371	3372	3373	3374	3375	3376	3377	3378	3379	3380	3381	3382	3383	3384	3385	3386	3387	3388	3389	3390	3391	3392	3393	3394	3395	3396	3397	3398	3399	3400	3401	3402	3403	3404	3405	3406	3407	3408	3409	3410	3411	3412	3413	3414	3415	3416	3417	3418	3419	3420	3421	3422	3423	3424	3425	3426	3427	3428	3429	3430	3431	3432	3433	3434	3435	3436	3437	3438	3439	3440	3441	3442	3443	3444	3445	3446	3447	3448	3449	3450	3451	3452	3453	3454	3455	3456	3457	3458	3459	3460	3461	3462	3463	3464	3465	3466	3467	3468	3469	3470	3471	3472	3473	3474	3475	3476	3477	3478	3479	3480	3481	3482	3483	3484	3485	3486	3487	3488	3489	3490	3491	3492	3493	3494	3495	3496	3497	3498	3499	3500	3
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179	3098	Metabotropic Glutamate Receptor 6	NM_000843		Homo sapiens
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			ctcatctccg tccagctcct tggagtgttt gtctggtttg ttgtggatcc cccccacatc	
			atcattgact atggagagca gcggacacta gatccagaga aggccagggg agtgcacaag	
			tgtgacattt ctgatctctc actcatttgt tcaattggat acagtatcct ctgtatggtc	

184	3100	Metabotropic NP_000836.1 Glutamate Receptor 8	actgttactg tttatgcacaa taaaacgaga ggtgtccag agaqtttcaa tgaagccaaa cctattggat ttaccatgta taccacctgc atcatttggt tagcttttcat ccccatcttt tttggtacag ccagtcagc agaaaagatg tacatccaga caacaacact tactgtctcc atgagtttaa gtgttcagt atctctggc atgtctata tgcccaaggt ttatattata attttcac cagacagaa tgtcaaaa cgcaagaga gcttcaaggc tgtgttgaca gctgccacca tgcaagcaa actgatccaa aaagaaatg acagacaaa tggcgaagtg aaaagtgaac tctgtgagag tcttgaaacc aacatttctt ctaccaagac aacatatatc agttacagca atcattcaat ctgaaacagg gaaatggcac aatctgaaga gacgtggtat atgatcttaa atgatgaaca tgagaccga aaaattcact cctggagatc tccgtagact acaatcaatc aaatcaatag tcagtcttgt aaggaacaaa aattagccat gagccaaaag tatcaataaa cggggagtga agaaacccgt ttatatacat aaacccaatg agtgtcaagc taaaagtattg cttattcatg agcagttaaa acaaatcaaca aaaggaaaac taatgttagc tcgtgaaaaa aatgctgttg aaataaataa tgtctgagt tattcttgta tttttctgtg attgtgagaa ctccggttcc tgtccacat tgtttaactt gtataagaca atgagctctg ttcttgtaat ggtgaccag attgaagccc tgggtgtgc taaaaataaa tgcaatgatt gatgcatgca atttttata caaataattt atttctaata ataaaggaat gttttgcaaa aaaaaaaaa aaaaactcga g	RVGDIIILGG LFPVHAKGER P RILDTCSRDT YALEQSLTFV MVANILRLEK IPQISYASTA LASEGNYGES GVEAFTQISR FANEDDIRRI LEAAKILNQ FDRYFRSRTL ANRRNVWFA KVQFVIDAVY SMAYALHNMH FNENGDAAGR YDIFYQYITN KPGERKKTVK GVPCCWHCER SPWAVVPFV AILGIIATTF AAPDTIICSF RRVFLGLGMC SLISVQLLGV FWFVVDPPH VTCTVYANKT RGVPTFNEA SMSLSASVSL GMLYMPKVYI VKSELCESELE TNTSSTKTTY	Homo sapiens
185	3212	Opioid mu- type Receptor	ggaattccgg ctataggcag aggagaatgt cagatgctca gctcggctcc ctccgcctga A cgctcctctc tgtctcagcc aggaactggtt tctgtaagaa acagcaggag ctgtggcagc ggcgaaaagg agcggctgag gcgcttgaa cccgaaaagt ctcggtgctc ctggctacct cgacacggg tgcccgcccg gccgtcagta ccatggacag cagcgtgcc cccacgaacg ccagcaattg cactgatgcc ttggcgact caagtgtctc cccagcacc agccccggtt cctgggtcaa cttgtccac ttagatggca acctgtcga cccatgcggt ccgaaccgca ccaacctggg cgggagagac agcctgtgcc ctccgaccgg cagtccttcc atgatcacgg ccatcacgat catggccctc tactccatcg tgtgctgtgt ggggtcttcc ggaacttcc	gctcggctcc acagcaggag ctcggtgctc cagcgtgcc cccagcacc agccccggtt cccatgcggt cagtccttcc ggggtcttcc ggaacttcc	Homo sapiens

186	3212	Opioid mu- type Receptor	NP_000905.1	MDSSAAPTNA PTGSPSMITA STLPFQSVNY RTPRNAKIIN FAFIMPVLII YVLIKALVTI EQONSTRIRQ atgaacactt ggtccctggc acaggcaacc aactacttcc ctctatacca	SNCTDALAYS ITIMALYSIV LMGTWPFGTI VCNWILSSAI TVCYGLMILR PETTFQTVSW NTRDHPSTAN cagccccacc aagtggcctt tgctgggtact tgctgagcct cgtacctgct	SCSPAPSPGS CVWGLFGNFI LCKIVISIDY GLPVMFMATT LKSVMMLSGS HFCIALGYTN TVDRTNHQLE tgctgtcagc cattgggatac catctctttc ggcctgtgct catgggccac	WVNLSHLDGN VMYVIVRYTK YNMFTSIFTL KYRQGSIDCT KEKDRNLRI SCLNPVLVAF NLEAETAPLP cccaacatca accacgggcc aaggtcaaca gacctcatca tgggctctgg	LSDPGPNRT MKTATNIYIF CTMSVDRYIA LTFSHPTWYW TRMVLVVAV LDENFKRCFR ccgtcctggc tcctgtcgct cggagctcaa tcgggtaccc gcacgctggc	NIIGRDSICP NLALADALAT VCHPVKALDE ENLVKICVFI FIVCWTPHI EFCIPTSSNI accaggaaag agccacagtg gacagctcaa ctccatgaac ttgtgacctc	Homo sapiens
187	3223	Muscarinic acetylcholin e Receptor M1	NM_000738	atgaacactt ggtccctggc acaggcaacc aactacttcc ctctatacca	cagccccacc aagtggcctt tgctgggtact tgctgagcct cgtacctgct	tgctgtcagc cattgggatac catctctttc ggcctgtgct catgggccac	cccaacatca accacgggcc aaggtcaaca gacctcatca tgggctctgg	ccgtcctggc tcctgtcgct cggagctcaa tcgggtaccc gcacgctggc	accaggaaag agccacagtg gacagctcaa ctccatgaac ttgtgacctc	Homo sapiens

188	3223	Muscarinic acetylcholin e Receptor M1	NP_000729.1	<p> tga  tggctggccc tggactatgt ggcagcaat gcctccgtca tgaatctgct gctcatcagc  tttgaccgt acttctccgt gactcgccc ctgagctacc gtgccaagcg cacacccgc  cgggcagctc tgatgatcg cctggcctgg ctggttctct ttgtgctcg ggcacagcc  atcctctctt ggcagctacct ggtagggag cggacgatgc tagctggga ctgtacatc  cagttctctt ccagcccat cacccttt ggcacagcca ttgctgctt ctactccct  gtcacagtca tgtgcacgt ctactggcg atctacggg agacagaaa cggagcacgg  gagctggcag cccttcagg ctccgagcg ccaggcaag ggggtggcag cagcagcagc  tcagagaggt ctgagccagg gctgagggc tcaccagaga ctctccagg ccgtgctgt  cgctgctgc gggcccccag gctgctgag cctacatcc tcagagggag agaggaagag  gacgaaggct ccatggagtc cctcacatcc tcagagggag agagcctgg ctccgaagt  gtgatcaaga tgccaatggt ggaccccgag gcacagggcc ccaccaagca gcccacagg  agctcccaaa atacagtcaa gagccgact aagaaaggcg gtgacgagc tggcaaggcg  cagaagcccc gtggaagga gcagctggc aagcggaaag cttctcgtc ggtcaaggag  aagaaggcg ctgggacct gactggcct ctctggcct tcactcctac ctggacacg  tacaacatca tgggtgctgt gtccacctc tgaaggact gtgtcccg gacctgtgg  gagctgggct actggctgtg ctacgtcaac agcaccatca acccatgtg ctacgcactc  tgcaacaaag ccttccggga cactttcgc ttgctgctg ttgcccgtg ggacaaagag  cgctggcgca agatcccaaa gcgcccctggc tccgtgcacc gcactccctc ccgccaatgc  tga </p>	Homo sapiens
189	3224	Muscarinic acetylcholin e Receptor M2	NM_000739	<p> A  ttacaagtcc ttataagaca  gtttggtgac cattatcggg  tccagaccgt caacaattac  ttttctccat gaactgtgac  tggtgtgtga cctttggcta  tgctcatcat cagctttgac  agcggaccac aaaaatggca  tctgggctcc agccattctc  gggagtgcta cattcagttt  ccttctattt gccagtgtac  agagcaggat aaagaaggac  gtctgggtaca aggaaggata  gcctggagca caacaaaatc  gtgttcaggg agaggagaag </p>	Homo sapiens

190	3224	Muscarinic acetylcholin e Receptor M2	NP_000730.1	<p>gagagtcca atgactccac ctcaagtagt gctgttgctt ctaatatgag agatgatgaa  ataacccagg atgaaaacac agtttccact tccctgggccc attccaaaaga tgagaactct  aagcaaacat gcatcagaat tggcaccacg acccccaaaa gtgactcatg taccacaact  aataccacg tggaggtagt ggggtcttca ggtcagaatg gagatgaaaa gcagaatatt  tagccccgca agattgtgaa gatgactaag cagcctgcaa aaaagaagcc tctctcttcc  cgggaaaaga aagtccaccg gacaattctg gctattctgt tggctttcat cctcaactgg  gccccataca atgtccatgg gctcattaac acctttttgt cactttgcat ccccaacact  gtgtggacaa ttggttactg gctttgttac atcaacagca ctatcaaccc tgcctgctat  gcactttgca atgccacctt caagaagacc tttaaacacc ttctcatgtg tcattataag  aacataggcg ctacaaggtg a</p>	Homo sapiens
191	3226	Muscarinic acetylcholin e Receptor M4	LG1143	<p>FLFSLACADL IIGVFSMNL TLYTVIGWYP LGPVWCDLWL ALDYVVSNAS VMNLLISFD  RYFCVTKPLT YPVKRTTKMA GMMIAAAWVL SFILWAPAIL FWQFIVGVRT VEDGECYIQF  FSNAAVTFGT AIAAFYLPVI IMTVLYWHIS PASKSRIKKD KKEPVANQDP VSPSLVQGR I  VKPNNNNMPS SDDGLEHNI QNGKAPRDPV TENCVQGEK ESSNDSTSVS AVASNMRDDE  ITQDENTVST SLGHSKDENS KQTCIRIGTK TPKSDSCTPT NTTVEVVGSS GQNGDEKQNI  VARKIVKMTK QPAKKKPPPS REKKVTRTIL AILLAFIITW APYNVMVLIN TFCAPCIPNT  VWTIGYWL CY INSTINPACY ALCNATFKKT FKHLMLCHYK NIGATR  CTGGGCACTG CCGATGTTCC GATACATGGCA CAGCAGGAGG TGCCGGAAGG TCTTTTAA A  GGTGGCGTTG CACAGAGCAT AGCAGGCGAG GTTGATGGTG CTGTTGACGT AGCAGAGGCCA  GTAGCCCAATG GACCACACCG GGTACAGGAT GCAGCTCTGG CAGAAGGTGT TCACCAAGGAC  CATGACGTTG TGAGCGCTCC CGGTGAGGAT GAAAGCTAAC ANAATGGCAA AGATCGGTCG  TGGCACTTTG CGTCCCGGG CGGCATCTG CCGTCTCTTG CGCACCTGGG TGCGAGCGAT  GCTAGCGAAC TTGGCGGCCA CGTTGGCCGC AGGCGCATGC CAGNCGGCGT GGGAGGGACA  ATCTCAGGGC TGGCACACAC TCATGGGCTG CTGGGCTTCG TCAAATTTTG GATCTTGGAC  CATCTGGGAG GCTTGGTTGA AGGCCCCCGG CTCGACTTG CGGGCATGAA TCCAGGCCCTT  ACTCTANAGG ATCCCCCCTT CTCC</p>	Homo sapiens
192	3226	Muscarinic acetylcholin e Receptor M4	NM_000741	<p>atggccaact tcacacctgt caatggcagc tcgggcaatc agtccgtgag cctggtcagc A  tcatcatccc acaatcgcta tgagacggtg gaaatggtct tcattgccac agtgacaggc  tccctgagcc tggtagctgt cgtgggcaac atcctgggtga tgcgtgccat caaggtcaac  aggcagctgc agacagtcaa caactacttc ctcttcagcc tggcgtgtgc tgatctcatc  ataggcgctt tctccatgaa cctctacacc gtgtacatca tcaagggtgta ctggccccctg  ggcgccgtgg tctgcgacct gtggctggcc ctgactacg tggtaggcaa cgctccctgc  atgaaccttc tcatcatcag ctttgaccgc tactctgctg tcaccaagcc tctcacctac  ctgccccggc gcaccaccaa gatggcagcc ctcatgattg ctgctgacctg ggtactgtcc  ttcgtgctct gggcgccctgc catcttgctt tggcagtttg tggtaggtgta gcggacggtg  cccgacaaac actgcttcat ccagttccctg tccaacccag cagtacacct tggcacagcc  attgctgctt tctacctgcc tgtggtcatc atgacggtgc tgtacatcca catctccctg  gccagtgcga gccgagtcca caagcacccg cccgagggcc cgaaggagaa gaaagccaag  acgctggcct tctcaagag cccactaatg aagcagagcg tcaagaagcc ccgccccgga  ggccgccccg gaggactgag caatggcaag ctggaggagg cccccccg ccagctgcca</p>	Homo sapiens

Accession	Gene	Protein	Species	Sequence
193	Muscarinic acetylcholin e Receptor M4	NP_000732.1	Homo sapiens	<p>ccgccaccgc gcccggtggc tgataaggac acttccaatg agtccagtc aggcagtgcc</p> <p>accagaaca ccaaggaacg ccagccaca gagctgtcca ccacagagg caccactccc</p> <p>gccatgcccg cccctccctt gcagccggg gccctcaacc cagcctccag atggtccaag</p> <p>atccagattg tgacgaagca gacaggcaat gagtgtgtga cagccattga gattgtgcct</p> <p>gccacgccg ctggcatgcg cctgcgcc aactggccc gcaagtgcg cagcatcgct</p> <p>cgcaaccagg tgcgaagaa gcggcagat gcggcccggg agcgaaaagt gacacgaacg</p> <p>atctttgcca ttctgtagc cttcatctc acctgacgc cctacaacgt catggtcctg</p> <p>gtgaacacct tctgccagag ctgcatccct gacacggtgt ggtccattgg ctactggctc</p> <p>tgctacgtca acagcaccat caaccctgc tgtatgtctc tgtgcaacgc cacccttaaa</p> <p>aagacctcc gccacctgct gctgtgccg tatcggaaca tcggcactgc caggtag</p> <p>MANFPPVNGS SGNQSVRLVT SSSHNRYETV EMVFIATVTG SLSLTVVGN ILVMSIKVN P</p> <p>RQLQTVNNYF LFLSLACADLI IGAFSMNLTY VYIKGYWPL GAVVCDLWLA LDYVVSNASV</p> <p>MNLLIISFDR YFCVTXPLTY PARRTTKMAG LMTAAAWVLS FVLWAPAILF WQFVVGKRTV</p> <p>PDNHCFIQFL SNPAVTFGTA IAAFYLPVVI MIVLYIHISL ASRSRVHKHR PEGPKEKKAK</p> <p>TLAFLKSPLM KQSVKKPRPG GRPGGLRNGK LERAPPPALP PPRPFVADKD TSNESSSGSA</p> <p>TQNTKERPAT ELSTTEATP AMPAPPLQPR ALNPASRWSK IQIVTKQTGN ECVTAIEIVP</p> <p>ATPAGMRPAA NVARKEASIA RNQVRKKRQM AARERKVRT IFAILLAFIL TWTPYNVMVL</p> <p>VNTFCQSCIP DTVWSIGYWL CYVNSTINPA CYALCNATEFK KTFRHLILCQ YRNIGTAR</p>
194	Muscarinic Acetylcholin e Receptor M5	NM_012125	Homo sapiens	<p>atggaaaggg attcttaaca caatgcaacc accgtcaatg gcaccccaatg aaatcaccag A</p> <p>cttttggaac gccacaggtt gtgggaagtc atcaccaattg cagctgtgac tgcgtggta</p> <p>agcctgatca ccattgtggg caatgtcttg gtcatgatct ccttcaaaatg caacagccag</p> <p>ctcaagacag ttaacaacta ttacctgtc agcttagcct gtgcagatct catcattgga</p> <p>atcttctcca tgaacctcta caccacctac atcctcatgg gacgtgggc tctcgggagt</p> <p>ctggcttggt acccttggtc tgcaatggac tacgtggcca gcaacgcttc tgtcatgaac</p> <p>cttctgggtg tcagttttga ccgttacttt tccatcaca gaccttgac atatcgggcc</p> <p>aagcgtactc cgaagaaggc tggcatcatg attgcttggg cctggctgat ctccttcact</p> <p>ctctggggcc cagcaatcct ctgctggcag tacttgggtg ggaagcggac agttccactg</p> <p>gatgagtgcc agatccagtt tctctctgag ccacacatca cttttggcac tgccattgct</p> <p>gccttctaca tccctgtttc tgtcatgacc atcctctact gtcgaatcta ccgggaaaca</p> <p>gagaagcgaa ccaaggacct ggctgacctc cagggttctg actctgtgac caaagctgag</p> <p>aagagaagc cagctcatag ggctctgttc agatcctgct tgcgtgttcc tgcacccacc</p> <p>ctggccccagc gggaaaggaa ccaggcctcc tggctcatct cccgcaggag cactccacc</p> <p>actgggaagc catcccaagc cactggcca agcgccaatt gggccaaagc tgagcagctc</p> <p>accacctgta gcagctaccc ttctctcagag gatgaggaca agcccgccac tgacctgtc</p> <p>ctccaagtgg tctacaagag tcagggtaag gaaagccag ggaagaatt cagtgtgaa</p> <p>gagactgagg aaacttttgt gaaagctgaa actgaaaaaa gtgactatga caccctaaac</p> <p>taccttctgt ctccagcagc tgtctataga cccaagatga agaaatgtgt ggcctataag</p> <p>ttccgattgg tggtaaaagc tgacgggaac caggagacca acaatggctg tcacaaggtg</p> <p>aaatcatgc cctgcccctt ccagtggcc aaggaaacct caacgaaagg cctcaatccc</p> <p>aacccagcc atcaaatgac caaacgaaag agagtgttcc tagtcaaga gaggaagca</p> <p>gccagacac tgagtgcct tctctggcc ttcatcatca catggacccc gtataacatc</p>



195	3227	Muscarinic Acetylcholin e Receptor M5	NP_036257.1	MEGDSYHNAT LKTVMNYYLL LLVISFDRYF DECQIQFLSE KRKPAHRALE TTCSSYPSSSE YLLSPAAAHR NPSHQMTKRK YWLCYVNSTV	TVNGTPVNHQ SLACADLIIG SITRPLTYRA PTITFGTAIA RSCLRCPRPT DEDKPATDPV PKSQKCVAYK FRLVVKADGN AOTLSAILLA TFRKTFKMLL	PLERHRLWEV IFSMNLYTTY KRTPKRAGIM AFYIPVSVMT LAQRENRQAS LQVYKSQKG FRLVVKADGN AOTLSAILLA TFRKTFKMLL	ITIAAATAVV ILMRWALGSG IGLAWLISFI ILYCRIYRET WSSSRSTST ESPEEFVKA QETNNGCHKV FIITWTPYNI LCRWKKKKVE	SLITIVGNVL LACDLWLALD LWAPAILCWQ EKRTKDLADL TGKPSQATGP ETEETFVKA KIMPCFPFVA MVLVSTFCDK EKLWQGNL	VMISFKVNSQ YVASNASVMN YLVGKRTVPL QGSDSVTKAE SANWAKAEQL TEKSDYDTPN KEPSTKGLNP CVPVTLWHLG LP	P Homo sapiens
196	3378	Tachykinin Receptor 3	NM_001059	ctattgcagt gaggcagaga tccgggactg gggtggagg ccacgggggc cctccccctc acctcaccaa gtgtgggtgt acaagcgcat ccatggccgc ttggcgccaa tctactccat ccagactgtc tacttgcctt gctttgtgca tactgtgtga ctctctgggg ccaaaagaaa tgccctatca acatccagca ccatcatcta gggtgtcctt atccaaaccc ttgaccccaa acccaagttt tcataagctc agattagtgt tgtcctatat	atctttcagc agaacttcag cagaccgggtg cgtgggtgca agttgagact cgcgctggga ccagttcgtg ggcagtgga gaggactgtc cttcaacaag ctactgccgc gacggccatt tgctacagca ccctcagtgt atggccagaa ctgtttccca aggagaaatc ggttgtcaaa tatttacttc ggctacctg ctgtgtctg catcaaaagt gcaaacagc cgatgcagac caatggctgc accctatacc gagaccatca accccttaga	ttccagtcct aggagtctcg gcatggcca gacgccgtga gggtggctgc ctgcctgtgg cagccgtcct gttttgggaa accaactact ttggtcaatt ttccagaact gcggtggaca accaagattg ctttattcca ggtcctcaaa tgctcatca ccaggagata atgatgatta attctcactg gctagctttt ataaaagat tccagctatg atgtacaccg accaccaggt tctcgcagga tctgtggatg tgggtgccagt aacagaaaagc	ccccgccaca cccgtgggtg agcagaaaac ctcgtagct ccaagctggc ccctccccg gctctggtcc catctggatc cctggctttc gcttcatagc cacagctgtg tattattgat tatttggatt catgccaggc ttaccatatt atacaccatt gttggaatta gtatcatgag gacgtaaaag gacatttgc acaactaaat gagctcaacc cttcaagaga gtcctccgct gctcaagacc ggagtccatg gaaaagagca tgccctccgc attccatttc attccatttc attccctat cagctatggt	A Homo sapiens		

197	3378	Tachykinin Receptor 3	NP_001050.1	<p>aaggtagtgt ataaatgtga caaagacact aataacatgt tagcctccac ccaaaataaa atgggcttta aattt</p> <p>MATLPAAETW IDGGGVGAD AVNLTASLAA GAATGAVETG WLQLLDQAGN LSSPSALGL P PVASPAPSQP WANLTNQFVQ PSWRIALWSL AYGVVAVAV LGNLIVIWII LAHKRMRTVT NYFLVNLAFS DASMAAENTL VNFYIALHSE WYFGANICRF QNEFFITAVF ASIYSMTAIA VDRYMAIIDP LKPLRSATAT KIVIGSIWIL AFLLAFPQCL YSKTKMPGR TLCFVQWPEG PKQHFTYHII VIIIVYCFPL LIMGITYTIV GITLMGGEIP GDTCDKYHEQ LKAKRKVVKM MIIIVMTFAI CWLPYHIYFI LTAIYQQLNR WKYIQQVYLA SFWLAMSSTM YNPIIYCCIN KRFRAGFKRA FRWCFFIKVS SYDELEKTT RFHPNRQSSM YTVRMESMT VVFDNDADT TRSSRKKRAT PRDPSFNGCS RRNSKSASAT SSFISSPYTS VDEYS</p>	Homo sapiens
198	3380	Neuromedin B Receptor	NM_002511	<p>gtgctgtgag gcttgccgcg ggacagtaaa cttgcagggg cgagaggag ggacatcgat A taaacctaaa tcgtggcggt tcagtcctca gggcaccgag cgcgtgaaaa ctccagcgga ctctgctgga aaggattcgg ttcccgaggg gtgggaaaag gattctctcg tgaccaccgg cgggaccacc acggagttgg tgatccgctg tggatcccg tccctctacc tgctcatcat caccgtgggc ttgctgggca acatcatgct ggtgaagatc ttcatcacca acagcgccat gaggagcgtc cccaacatct tcattctctaa cctggcggcc ggggacttgc tgcgtctgct cactgcgtc cgggtggacg cctcgcgcta cttcttcgac gattggatgt ttggcaaggt gggctgcaaa ctgattccctg tcatccagct cactccgtg ggggtttccg tgttcaactc cactgcccgc agcggcgaca ggtacagagc catggttaac cccatggaca tgcagacgtc aggggcattg ctgcggacct gtgtgaaggc catgggtatc tgggtggtct ccgtgttgc ggcagttccc gaagcgggtgt tttcagaagt ggtcgcgcatc agtagcttgg ataatagcag cttcacagca tgtatcccat accctcaaac agatgaatta catccaaaga ttcatcagat gctcattttc ttggtctatt tcctcatacc acttgctatt attagcattt attattatca tattgcaaaag accttaatta aaagcgaca caatcttctt ggagaataca atgaacatac caaaaaacag atggaaacac ggaacgcctt ggctaaaaat gtgcttgtct ttgtgggctg tttcatcttc tgttggtttc caaacacat cctttacatg tatcgggtctt tcaactataa tgagattgat ccatctctag gccacatgat tgtcacctta gttgcccggt tctcagttt tggcaattct tgtgtcaacc catttgctct ttactactc agtgaaaagt tcaggaggca tttcaacagc caactctgct gtgggaggaa gtcctatcaa gagagaggaa ccagctacct actcagctct tcagcgggtg gtatgacatc tctgaaaagc aatgctaaga acatgggtgac caattctgtt ttactaaatg ggcacagcat gaagcaggaa atggcaatgt gattttggcc attcaactca ctacctggag agaacttagt aa</p> <p>MPSKSLSNLS VTTGANESGS VPEGWERDEL PASDGTTEL VIRCVIPSLY LLIITVGLLG P NIMLVKIFIT NSAMRSVPNI FISNLAAGDL LLLLTCPVD ASRYFFDEWM FGKVGCKLIP VIQLTSVGS VFTLALSAD RYRAIVNPMQ MOTSGALLRT CVKAMGIWV SVLLAVPEAV FSEVARISL DNSSFTACIP YPQDELHPK IHSVLIPLVY FLIPLAIISI YYTHIAKTLI KSAHNLPGY NEHTKQMET RKRLAKIVLV FVGCIFCWF PNHILMYRS FNYNEIDPSL GHMIVTLVAR VLSFGNSCVN PFALYLLSES FRRHFNSQLC CGRKSQERG TSYLLSSAV RMTSLKSNK NMVTNSVLIN GHSMKQEMAM</p>	Homo sapiens
199	3380	Neuromedin B Receptor	NP_002502.1	<p>atggtggtgt ataaatgtga caaagacact aataacatgt tagcctccac ccaaaataaa atgggcttta aattt</p> <p>MATLPAAETW IDGGGVGAD AVNLTASLAA GAATGAVETG WLQLLDQAGN LSSPSALGL P PVASPAPSQP WANLTNQFVQ PSWRIALWSL AYGVVAVAV LGNLIVIWII LAHKRMRTVT NYFLVNLAFS DASMAAENTL VNFYIALHSE WYFGANICRF QNEFFITAVF ASIYSMTAIA VDRYMAIIDP LKPLRSATAT KIVIGSIWIL AFLLAFPQCL YSKTKMPGR TLCFVQWPEG PKQHFTYHII VIIIVYCFPL LIMGITYTIV GITLMGGEIP GDTCDKYHEQ LKAKRKVVKM MIIIVMTFAI CWLPYHIYFI LTAIYQQLNR WKYIQQVYLA SFWLAMSSTM YNPIIYCCIN KRFRAGFKRA FRWCFFIKVS SYDELEKTT RFHPNRQSSM YTVRMESMT VVFDNDADT TRSSRKKRAT PRDPSFNGCS RRNSKSASAT SSFISSPYTS VDEYS</p>	Homo sapiens

200 3404 Neuropeptide NM\_000910  
Y Receptor  
Type 2

Homo  
sapiens

tatcctatcc ctatcctagc ttttaacctg agccagagct cactacacag gttcctggct A  
atcgagtctg aatctgcact actcaactta taaactgtct gcagacacct gtttaggaaa  
ttgctgatac tggcgccgag gatctgaact cgctttacct tcttggttgg agcacaggga  
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agctgtgtg tgaatatga tggatgaatt ctgaccagag ctatgaatct ggttgatggc

[illegible]

202	3405	Neuropeptide NM_005972 Y Receptor Type 4	atgaacacct ctcaacctct tgggaccccc atacaacttc ggcccttgctg ctcccaaaaat ctccacaagg tgaacaacaga A agcaaacccc tgggaccccc atacaacttc tctgaacatt gccaggattc cgtggacgtg atggtcttca tgcctacttc ctacagcatt gagactgtcg tgggggtcct gggtaacctc tgcctgatgt gtgtgactgt gaggcagaag gaaaaagcca acgtgacca cctgcttacc gccaacctgg ccttctctga ctctctcatg tgcctcctct gccagccgt gccgcgctc tacaccatca tggactactg gatctttgga gagacctctt gcaagatgtc ggccttcac cagtgcattg cggtagcgtg ctccactcct cgcgtcgtcc cagtggccct ggagagcat cagctcatca tcaacccaac aggcctggaag cccagcatct cacaggccta cctggggatt gtgctcatct gggctattgc ctgtgtcttc tccctgccct tccctggcaa cagcatcctg gagaaatgtc tccacaagaa ccaactccaag gctctggagt tccctggcaga taagtggtc tgtaccgagt cctggccact ggctcaccac cgcacatct acaccactt cctgctctc ttccagtact gcctccact gggcttcac ctggtctgtt atgcacgcat ctaccggcgc ctgcagaggc aggggcgcgt gtttcacaag ggcacctaca gcttgcgagc tgggcacatg aagcaggtea atgtgtgtgt ggtggtgatg gtggtggcct ttgcegtgct ctggtgctc ctgcatgtgt tcaacagcct ggaagactgg caccatgagg ccatcccat ctgccacggg aacctcatct tcttagtgtg ccaacttgctt gccatggcct ccaactgct caacceattc atctatggct ttctcaacac caacttcaag aagtagtcca aggcctggt gctgacttgc cagcagagcg ccccccctga ggaagtggg gctaagtggc aggtccaatc ccatthaa gtctccaaa ggtcccctgag gtaagtggc aggtccaatc ccatthaa CLMCVTVRQK EKANVTNLLI ANLAFSDFLM CLICQPLTAV YTIMDYWIFG ETLCKMSAFI QCMSVTVSIL SILVVALERH QLIINPTGWK PSISQAYLGI VLIWVIACVL SLPFLANSIL ENVFHNHSHK ALFELADKV CTESWPLAHH RTIYTFELL FQYCLPLGFI LVCYARIYRR LQRQGRVFHK GTYSLRAGHM KQNVNVLVM VVAFVIMLP LHVNSLEDW HHEAIPICHG NLIFLVCHLL AMASTCVNPF IYGFINTNFK KEIKALVITC QQSAPLEESE HLPSTVHTE VSKGSLRLSG RSNPI	Homo sapiens
203	3405	Neuropeptide NP_005963.1 Y Receptor Type 4	gaaaggctat cggtaacaac tgacctgcca caaagttaga agaaaggatt gattcaagaa A agactataat atggatttag agctcgacga gtattataac aagacacttg ccacagagaa taatactgct gccactcga atcttgattt cccagtctgg gatgactata aaagcagtgt agatgactta cagtatttcc tgattgggct ctatacatctt gtaagtcttc ttggctttat ggggaatcta ctatatttaa tggctctcat gaaaagcgt aatcagaaga ctacggtaaa cttccctcata gccaactcgg ctttttctga tatcttggtt gtgctgtttt gctcaccttt cacactgacg tctgtcttgc tggatcagtg gatgtttggc aaagtcattg gccatattat gccttttctt caatgtgtgt cagttttggt ttcaacttta attttaatat caattgcat tgtcaggtat catabgataa aacatcccat atctaataat ttaacagcaa accatggcta ctttctgata gctactgtct ggacactagg ttttgccatc tgttctcccc ttccagtgtt tcacagtctt gtggaacttc aagaacatt ttgttcagca ttgctgagca gcaggatttt atgtgttgag tcatggccat ctgattcata cagaattgcc ttactatct ctttattgct agttcagtat attctgacct tagtttgtct tactgttaagt catacaagtg tctgcagaag tataagctgt ggattgtcca acaagaaaa cagacttgaa gaaaatgaga tgatcaactt aactcttcat ccatccaaa agagtgggct tcaggtgaaa ctctctggca gccataaatg	Homo sapiens
204	3406	Neuropeptide NM_006174 Y Receptor Type 5		Homo sapiens

205	3406	Neuropeptide Y Receptor Type 5	NP_006165.1	MDLEDEYN KTLATENNTA ATRNSDFPVW DDYKSSVDDL QYFLIGLYTF VSLLGFMGNL P	Homo sapiens
				LILMALMKKR NQKTTVNFLI GNLAFFSDILV VLFCSPTLT SVLLDQWMFG KVMCHIMPFL	
				QCVSVLVSTL ILISIAIVRY HMIKHPIINN ITANHGYFLI ATVWTLGFAI CSPLPVFHSI	
				VELQETFGSA LLSRYLCVE SWPDSYRIA FTISLLLVQY ILPLVCLTVS HTSVCRSISC	
				GLSNKENRLE ENEMINLTILH PSKKSQPQVK LSGSHKWSYS FIKKHRRYS KKTACVLPA	
				ERPSQENHSR ILPENFGSVR SOLSSSSKFI PGVPTCFEIK PEENSVDHEL RVKRSVTRIK	
				KRSRSVFYRL TILILVFAVS WMPLHLFHV TDFNDNLISN RHFKLVYCIC HLLGWMSCCL	
				NPILYGFLLN GIKADLVSLI HCLHM	
206	3408	Neurotensin Receptor Type 1	NM_002531	tcaagctcgc cccgcgcgc cgcagccgcg ctgggcgcgtg tctctggggg cctggggaac A	Homo sapiens
				cgcgcggtt ggagatcgga ggacactgga acccgtggca agcgcgcgc cggagagacag	
				ccgcaggaac caggggttct ggagctagga cccgttcgtg ggcagtcgc aggagacgcg	
				agcccgagc cgcgagcccg ggcgcgcgcg tctgggtctg cgccttcgc actggacgcg	
				gcgcgcgcg gctctgcga cgcgcctcc cctgggcctg cgttcacgc tccccgcctg	
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				aagaccctca tgcgcgcga ggcgcgcga agcttcata cgcgcctct gtcgcctctg	
				gccctgctga cgggtgcctat gctgttcacc atgggcgcgc agaaccgcgc cgcgcgcgc	
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				ctgcctacc acgtgcgcgc cctcatgttc tgcctacat cggatgagca gtgcactcg	
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gtctctgggg cggggtctgt ggtgtgact gaagtgggt ttcccgttga tgtcttgatg  
ctctatctg tgcacttacc gtaggtaggg acagtgtcc atgcaccaca gacacacca

207	3408	Neurotensin Receptor Type 1	NP_002522.1	cgacacctga tctcgtatca ctagcttgcg gccaggtcat gatgtggccc cggaagctgg ccctgctgac catgagtgc tctggtcatgg agtcggagc ccctgagccg gcccctggtg acggcacagc cctcacagct caaacgcca gcccgaagg cctcgatgtg g aacaacccc gtgtatctct caataaaggt gcccgaagg naservlaap sseldvntdi p MRLNSSAPGT PGTAAADPFQ RAQGLEEL LAPFGNAG KSLQSLQST VHYHLGSLAL SLLTLLIAM YSKVLTVAVY LALFVGVTVG NTVTAFILAR KSYATLNV SLSVERYLAI CHPEKAKTLM PVELYNFIV HHPWAFGDAG CRGYFLRDA CTYATLNV SLSVERYLAI CHPEKAKTLM SRRTKKFIS AIWLASALLT VPMLFTMGEQ NRSADQHGAG GLVCTPTIHT ATVKVVIQVN TFMSFIFMV VISVLTIIA NKLTVMVRQA AEQGVCTVG GEHSTFMAI EPGRVQALRH GVRVLRVVI AFVWCWLPYH VRLMFCYIS DEQWTFPLYD FYHYFMYVTN ALFYVSSTIN PILYNLVSAN FRHIFLATLA CLCPVWRRR KRPAFSRKAD SVSSNHTLSS NATRELY cctgctctgc acctgctgc gactgccag cggctgaggg cgggggtctc caggtggtc a ccagctccca aggaggttgc agaagtaccg tacagagtgg atttgcaggg cagtggcatg gagccctct tcccgcgc gttctggag gttatctac gcagccacct tcaggccaac ctgtccctcc tgagcccaa cccagctctg ctgccccgc atctgctgt caatgccagc cacgggcct tctgcccc cgggtcaag gtcaccatcg tgggctcta cctggccgtg tgtgtcggag ggctcctggg gaactcctt aactggccc tggccgacac tctgtctctg atgaagacag ccaccaatat ttacatctt aactggccc tggccgacac tctgtctctg ctgacgtgc ccttccaggg caggacatc ctctgggtt tctggcgtt tgggaatgcg ctgtgcaaga cagtcattgc cattgactac tacaacatgt tcaccagcac ctacacctc actgccatga gtgtggtatc ctatgtagcc atctgccacc ccatcctgc cctgcagtc cgcacgtcca gcaagccca ggctgtcaat gtggccatct ggccctggc ctctgttctg gggttctccg ttgccatcat gggtcggca caggtcgagg atgaagagat cagtgccctg gtggagatcc ctaccctca ggattactgg ggccgggtgt ttgccatctg catctctc ttctcttca tcttcccc ctctgtctc tctgtctgt acagcctcat gatccggcgg ctccgtggag tccgctgct ctccgggctc cgagagaagg accggaacct gcgccgcatc actcggctgg tctgtgtgtt agtggctgtg tctgtgggt gctggacgct tgtccaggtc ttcgtgctgg cccaagggt ctaggttcaac agtgcctca acccatctc ctacgcttc cgcttctgca cggccctggg ctacgttccg agtttctgt gtgcatctgc cctgcgcccg ctggatgaga actcaagg ctgttccg cgttccagc attgcccct ggccctgcaag gacgtgcagg tgtctgacc cgtgcgagc attgcccct acgtggcct ggccctgcaag acctctgaga cgttaccgg gccgcatga ctaggcgtg acctggccat ggtgctgtc agcccgaga gccatctac gcccaacaca gactcacac aggtcactgc tcttagggc gacacacct ggccctgag catccagagc ctgggttggg ctttctctg tggccaggg atgctcggtc ccagaggag acctagtac atcatggac aggtcaaaag attagggcca cctccatggc ccagacaga ctaaagctgc cctcctggtg cagggccgag ggacacaaag gacctacctg gaagcagctg acatgctgtt ggacggcct tactggagcc cgtgcccc cctccccgtg ctctcatgta ctctggcct ctctgctgt gcgttggcag aacctgggt gggcaggcac ccggaggagg agcagcagct gtgtcatct gtgccccca tgtgtgtgt gctgtttgca tggcagggt ccagctgct tcagccctgt caggtctct cagggcagct ggacaggctt ggcacggccc gggaagtga gcaggcagct tttctttggg gtgggacttg	Homo sapiens
208	3452	Opiate Receptor- Like 1 (OPRL1)	NM_000913	cctgctctgc acctgctgc gactgccag cggctgaggg cgggggtctc caggtggtc a ccagctccca aggaggttgc agaagtaccg tacagagtgg atttgcaggg cagtggcatg gagccctct tcccgcgc gttctggag gttatctac gcagccacct tcaggccaac ctgtccctcc tgagcccaa cccagctctg ctgccccgc atctgctgt caatgccagc cacgggcct tctgcccc cgggtcaag gtcaccatcg tgggctcta cctggccgtg tgtgtcggag ggctcctggg gaactcctt aactggccc tggccgacac tctgtctctg atgaagacag ccaccaatat ttacatctt aactggccc tggccgacac tctgtctctg ctgacgtgc ccttccaggg caggacatc ctctgggtt tctggcgtt tgggaatgcg ctgtgcaaga cagtcattgc cattgactac tacaacatgt tcaccagcac ctacacctc actgccatga gtgtggtatc ctatgtagcc atctgccacc ccatcctgc cctgcagtc cgcacgtcca gcaagccca ggctgtcaat gtggccatct ggccctggc ctctgttctg gggttctccg ttgccatcat gggtcggca caggtcgagg atgaagagat cagtgccctg gtggagatcc ctaccctca ggattactgg ggccgggtgt ttgccatctg catctctc ttctcttca tcttcccc ctctgtctc tctgtctgt acagcctcat gatccggcgg ctccgtggag tccgctgct ctccgggctc cgagagaagg accggaacct gcgccgcatc actcggctgg tctgtgtgtt agtggctgtg tctgtgggt gctggacgct tgtccaggtc ttcgtgctgg cccaagggt ctaggttcaac agtgcctca acccatctc ctacgcttc cgcttctgca cggccctggg ctacgttcaac agtgcctca acccatctc ctacgcttc ctggatgaga actcaagg ctgttccg cgttccagc attgcccct ggccctgcaag gacgtgcagg tgtctgacc cgtgcgagc attgcccct acgtggcct ggccctgcaag acctctgaga cgttaccgg gccgcatga ctaggcgtg acctggccat ggtgctgtc agcccgaga gccatctac gcccaacaca gactcacac aggtcactgc tcttagggc gacacacct ggccctgag catccagagc ctgggttggg ctttctctg tggccaggg atgctcggtc ccagaggag acctagtac atcatggac aggtcaaaag attagggcca cctccatggc ccagacaga ctaaagctgc cctcctggtg cagggccgag ggacacaaag gacctacctg gaagcagctg acatgctgtt ggacggcct tactggagcc cgtgcccc cctccccgtg ctctcatgta ctctggcct ctctgctgt gcgttggcag aacctgggt gggcaggcac ccggaggagg agcagcagct gtgtcatct gtgccccca tgtgtgtgt gctgtttgca tggcagggt ccagctgct tcagccctgt caggtctct cagggcagct ggacaggctt ggcacggccc gggaagtga gcaggcagct tttctttggg gtgggacttg	Homo sapiens



209	3452	Opiate Receptor- Like 1 (OPRL1)	NP_000904.1	MEPLFPAPFW VCVGGLLGNC ALCKTVIAID VGVPVAIMGS RLRGVRLLSG LRFTALGVV KTSETVPRPA	EVYIGSHLQG LVMVILRHT YNNFTSTFT AQVEDEEIEC SREKDRNLRR NSCLNPILYA	NLSLLSPNHS MKMTATNIYI LTAMSVDRYV LVEIPTPDY ITRLVLVAVA FLDENFKACF	LLPPHLLINA FNLLADTLV AICHPIRALD WGPVFAICIF VFVGCWTPVQ RKFCASALR	SHGAFPLGL LLTLPFQGT VRTSSKAQAV LFSFIVPLV VFVLAQGLV RDVQVSDRVR	KVTIVGLYLA ILLGFWPFGN NVAIWALASV ISVCYSLMIR QPSSETAVAI SIKDVVALAC	Homo sapiens
210	3513	Ocular Albinism 1 (Nettleship- Falls) (OAL)	NM_000273	atgacccagg atggcctccc gtgctgagct ttggcgctgg gcgacgtccc ggctgcctgg agcgtctcgg atgtggatcc gcttatctgg gcgtggggcc gtgtccagg cccctgctgc gcctctttac gtgatcaaga atcatcaatg ttgaaacctg gccagggat cagtcctccc caccatccc gggcagactt gaaattcaca	caggcgcggc cgcgcttagg tccagccggc gccttctgca cgccggcctc gtatggtgat atatgaacca agctgctcga tgatccggag tggccacctt gtgagcgggg tggttctcgt ttaaagggaag tcgatttttt aaagcctttt tcagaaactgc ttctcttctg ggaaggagat cactgatgcc ctgacgaagc ctgcaagtga	gggtcctggc gacctctgc ggccttccc gtgctgccc gttcggcctc cggtgccacc cacggaatt cagtgcctgc atcggcagga gctctgtgtg cctggaccac ggcgaacccc acaaggcatt caaaatcatg attctatctt agccaagacc tttggccttc ccagtgggaa ccatgaaaaa cctgagcatg atcctgcaac	acaccggagc tgcccacgc gcgtctggc ggcgcgggc ctgcgcctc gtgtggttag tggcctgctg ttctggtggc ctgagcaaca gagggagccg gccatcccc atcctgttcc tacacggaga ctggttttaa gagatgcaaa acatggttta tactgacca ccagtgggaa ccatgaaaaa cctgcttcog ctgtctgaag aaaaatgagg	cgctccgcg gggacgcagc tgggcagcgg ccgcggggcc cgctgcctg gattcccaaa ctttctgcgt tggtttgcta tcacatcatg ccatgctcta catgtacctg aaaagacagt acgagaggag tattttgttg cagatatcaa tstatgggaat caggatgcag cctcggtgtt tgaagggtgc ggaagggtgc gttctgatgc gtgacccctg	aacacagccc cacgcagctc cgggtctcgc cgggtccccc cgaccttctc ttttgttgac ggggagtgcg tggtttgcta tgcagtggat tcacatcatg ctaccttcc catgtacctg gactgcagtg gatgggagcc gtgtctgaat tggagggttct cctgaaatcca cctgggtttt tgaagggtgc tcaagtggtg cagcacaatt tctcccaacc	Homo sapiens

211	3513	Ocular Albinism 1 (Nettleship- Falls) (OAL)	NP_000264.1	catggagacc tatgaagggg atgtgctggg ggtccagacc ccattattcct cagactcaac aattcttggt ctttagaact gtgttctcac cttcccaaca ctgcactgcc gaagtgtagc ggcccccaaa ccttgctctc atcaccagct agagcttctt cccgaaggcc ctttaggata ggagaaaggg ttcatgcaca cactgtgag aatgaagag cccctccag accactctac agctgctcta gccttagtg cactaggaa gtttctgtg ctggctgta agtaagtgt aagctccaca tccctggga agtagttaa taaataggt atgctg	Homo sapiens
				LALGLLQLLP GRRAPGSP ATSPASVRI LRAAACDLL CGLGMVIRST VWLGFNFVD SVSDMNHTEI WPAAFVCSA MWIQLLYSAC FWLFCYAVD AYLVIRRSAG LSTILLYHIM AWGLATLLCV EGAAMLYPS VSRCEGLDH AIPHYVTMYL PLLLLLVANP ILFQKTVTAV ASLLKGRQGI YTENERMGA VIKIRFFKIM LVLIICWLSN IINESLLFYL EMQTDINGGS LKPVRTAAKT TWFMGILNP AQGFLLSLAF YGWTGCSLGF QSPRKEIQWE SLTTSAAEGA HPSPIMPHEN PASGKVSQVG GQTSDEALSM LSEGSASTI EIHTASESCN KNEGDPALPT HGDL	
212	3544	UDP-glucose Receptor (KIAA0001)	NM_014879	gaacagtgtt acctgggagc ctacaatgag aggtatttca aatgagtga agcatgactc A tcacagatga aggcctagac gcaggatctt taatggaaaa acacttgggc cacttcaaga cgacaaacgc tcactgggca aaacaccttc actgaaaaga gacctcatat tatgcaaaaa aaatcttaag aggcctctgc cttcagaagt tacaagatga tcaattcaac tccacacag ctccagatg aatcctgctc tcagaacctc tcagatcact agcagatcat tctctgtgctg tactgtatgg tcttcattgc gggaatccta ctcaatggag tgtcaggatg gatattcttt tacgtgccc gctcgaagag ttctcatcct tatctcaga acattgttat tgctgacttt gtgatgagcc tgacttttcc ttccaagatc cttgggtgact caggccttgg tccctggcag ctgaacgtgt ttgtgtgagc ggtctctgac gtgctcttct acgtcaacat gtacgtcagc attgtgttct ttgggctcat cagctttgac aggtattata aaattgtaaa gcctctttgg acttctttca tccagtcagt gattacagc aaacttctgt cagtgatagt atggatgctc atgctcctcc ttgctgttcc aaatattat ctaccaacc agagtgttag ggaggttaca caataaaaat gtatagaact gaaaagtga ctgggacgga agtggcaca agcatcaaac tacatcttgc tggccatctt ctggattgtg ttcttttgt taatcgtttt ctatactgct atcacaaaaga aaatctttaa gtccacctt aagtcaagtc ggaattccac ttcggtcaaa aagaaatcta gccgcaacat attcagcatc gtgtttgtgt tttttgtctg ttttgtacct taccatattg ccagaatccc ctacacaaag agtcagaccg aagctcatta cagctgccag tcaaaagaaa tcttgcggtat tatgaaagaa ttcactctgc tactatctgc tgcaaatgta tgcttgacc ctattattta ttcttttcta tgccagccgt ttagggaaaat cttatgtaag aaattgcaca ttccatbaa agctcagaat gacctagaca ttccagaat caaaagagga aatacaacac ttgaaagcac agatactttg tgagtctcta cctcttcca aagaaaagacc acgtgtgcat gttgtcatc tcaattacat aacagaaatc aataagatat gtgccctcat cataaatatc atctctagca ctgccatcca atttagttca ataaaattca aatataagtt tccatgcttt ttgttaacat caaagaaaac ataccatca gtaatttctc taatactgac ctttctattc tctattaata aaaaattaat acatacaatt attcaattct attatattaa aataagttaa agtttataac cactagtctg gtcagttaat gtgaaaattt aaatagtaaa taaaacacaa cataatcaaa gacaactcac tcaggcatct tctttctcta aataccagaa	Homo sapiens

Accession	Gene	Protein	Species
213	UDP-glucose Receptor (K1AA0001)	3544	Homo sapiens
214	Oxytocin Receptor	3582	Homo sapiens

atcgtgctcg ctacctgcta cggccttata agttcaaga tctggcagaa cttgcggctc  
aagaccgctg cagcggcggc gccgagggc ccagagggcg cggcggctgg cgatggggg  
cgctggccc tggcgctgt cagcagctc aagctcatc ccaaggccaa gatccgcacg  
gtcaagatga ctttcatcat cgtgctggc ttcattgtgt gctggacgcc ttcttcttc  
gtcagatgt ggagcgtctg ggatgccaac tgcacccctt ggcctcggc cttcatcatc  
gtcatgctcc tggccagcct caacagctgc tgcacccctt ggcctcggc cttcatcatc  
ggccacctct tccacgaact cgtgcagcg ttcctgtgct gctccgccag ctacctgaag  
ggcagacgcc tgggagagac gactgccagc aaaaagagca actcgtcctc ctttgcctg  
agccatcgca gctccagcca gaggagctgc tccagcctc ccacggcgtg accaccagc  
cagggccagg gctgcagcct gaggctcagg ctgtcctggc ataagtgcct tgcctcagg  
tgatggcgtg tgttctgta taaggtacct atcagtttgt atccctccc tcttggggt  
ggcttcagtg ggttgagag ggcctccat gatggaagat gataggggac tcagccatca  
gacaacccc tggcctccta cactacttc taccacctg aacctctgc tgcctgggc  
agtgaagtgc ttgtttttc tctggactt gtaatttcac tccagtatat ttttacttct  
tcattctggg atattgtgaa aagcggtaaa tataggattg gtgaccaatt gggtcaggaa  
gtccagtggt ctggacttgg ggtaagcagt ggggttgagg cctcagatgg gaagggtggt  
gtaagatcc tctgacctc aaagtgtatt tgcctttaa gcaacaaatg ctggggtcct  
tggggaccag cttgtcagag ggtagcccta agagaagggtt attaccttgt aagacctct  
ggcgagtg accctattaga acttgggta aaaaatttta agaagctaat gtttaagaag  
catttgggaa agaaaaagaa ataatgtat ccagatagga aaagaagaag taaaactatt  
tgcagatgac acagtttgt atatagaaa tccaaaggaa ctcacacaca cacacacaca  
cacacacgca cacagctatt agaactaata agcaagttcc gcaaggtttc agatacaga  
atcaatatac aaaaatgaat tgtatttctt tatactagca acaacaata tgaaaaagaa  
gttaataaat tccatttata ataccatcag aaagaataaa ataggaaatca acttaacaaa  
acaagtgcga gactgaaaac taaaaattg gaaagaaatt aaagaaggct taaataaatg  
gaaagacatc ctgtgttcat ggatcagact tagtattgtt aagatggcaa tactatccta  
actgacatgc agattcagtg caatccttat gaaaatcata gctggctttt ttacagaaat  
tgataagcta gtcccaaaat tcataaagaa atgcaaggga ccagatatac caaataagct  
ttgaaaaaga acaagtttg tggattcaca cttcctgatt tcataattta cgataaagg  
aatcagctca gtgtgttact ggttaagga tagacatacg gacagaata aagagtacag  
atatgaacac ttatacttac ggtcaattga ttttgacaa ggttcccaa acaattcaat  
agagaaagga gactctttc acaaatggc accgagacaa tgatatgcaa gtgcaaaaga  
atgaggttgg acccttactc acactatgtg caaaaatcaa ctcaaacgc atccaagatc  
taaatataag agctgaaact ataaaatctt agaaagaaac ataggcatag atctttgtaa  
ccttgaatta ggcagtggt tcttagatat gataccacaa gatacagcaa ccaatggaaa  
aataggtaaa ttggacttaa tcaagatttg aagcttttgt gattgaaaa acctatcaa  
gaaggtgaaa agataacctg cagaatggga gaaaatattt gcgagtcata tataatgata  
ggggcttcta tctggaatat ataaataact cttataaac acataaagg agaaaaata  
atcaatttaa aaaaagggtt aacggtttga atagacattt ctcaagaa gatattgcaa  
tggctactaa gcacatgaaa aatactcaac attattattt cttaggaaa tgcaagtcaa  
aatcacaaatg agattccagt ttacaatcac taggtggtc acaataaaaa gatggacaag

215	3582	Oxytocin Receptor	NP_000907.1	MEGALANWS AANAASAP PGAENRTAG PPRNEALAR VEVAVLCIL LLALSGNACV P	Homo sapiens
				aacgagtgct ggtgaggatg tagagaaact ggtagaaatt taaattgttg gtgggaatgt aaatggtgca cctgctttga aaaacagttt ggcagtacct caaaaagttt aacgtagagt gaccatatga ccaggaatg ccaactcctag gtatttacc c aagagaaatg aaaaagtaca tacacacaaa aacttgtaca ccaatgttca tagcaacatt atttgaata gccaaaaagt ggaacaacc caaatgtcta ccaactgatg aatgggaaat aaaatgtggt ctgtccacgc aatggaacat tattagactc taaaaagaaa gtgaagatac acacatgcca caactggat gagccttgaa aacttgctaa gtgaagaaga ccaggtgcaa agccccacat attgtctgac tgcattgaaa tgcaatgtct aaaatggacg aatctatata gagtgaatat agattagcgt ttgccagggc ctggaggctg tgagagatga ggcattgacta ctaagggttt ggggtttctt ttctgggtga tgaataatgt cgaataatgt ggtgattgtg cacgattttg agaattgact aaaaaccaat gaactttaa aataaaaaat aaacaaa LALRTTRQK HSRLFFMKH LSIADLVAV FQVLPQLLWD ITFRFYGPD L LCLRVKYLQV VGMFASTYLL LMSLDRLA ICQPLRLRR RTDRLAVLAT WLGLVASAP QVHIFSLREV ADGVFDCWAV FIQPWGPKAY ITWITLAVYI VPIVILATCY GLISFKIWQN LRLKTAATAA AEAPEGAAG DGRVALLARV SSVKLISKAK IRTVKMTFII VLAFIVCWTP FFFVQWWSVW DANAPKEASA FIIVMLLASL NSCCNPWIYM LFTGHLFHEL VQRLCCSAS YLKGRRLGCT SASKNSNSS FVLSHRSSQ RSCSQPSTA	
216	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	NM_002564	cggcacgagg caccgcaga ggagaagcgc aggcagtggt cgagaggagc ccttgtggc A agcagcacta cctgcccaga aaaaatcttg aggttgggctg tggccccagg cctggggacc tgtttttctt gtttcccga gattccctg cagcccggtc caggtccagg cgtgtgcatt catgagtgag gaaccgtgc aggcgtgag cactctgacc tggagagcag gggctgggtca gggcgatggc agcagacctg ggccccctga atgacacat caatggcacc tgggatgggg atgagctggg ctacaggtgc cgcttcaacg aggaactcaa gtacgtgctg ctgctgtgt cctacggcgt ggtgtgctg cttgggctgt gtctgaacgc cgtggcgctc tacatcttct tgtgccgcct caagacctgg aatgcgtcca ccacatatat gttccacctg gctgtgtctg atgcaactga tgcggcctcc ctgcccgtgc tggctctatta ctacgccgc gccgaccact ggcccttcag cagggtgctc tgcaagctgg tgcgttctct tttctacacc aacctttact gcagctcctt cttctcacc tgcatacagc tgcacgggtg tctggcgctc ttacgacctc tgcgtcctt gcgtggggc cgggccgct acgtcgccg ggtggccggg gccgtgtggg tgttggtgct ggctggccag gcccccgtgc tctactttgt caccaccag gcgcgcgggg gccgcgtaac ctgccaacgac acctcgccac ccgagctctt cagccgcttc gtggcctaca gctcagtcac gctgggctg ctcttcgagg tgcctttgc cgtcatcctt gtctgttacg tgcctatggc tggcgactg ctaaaagccag cctacgggag ctcggggcgc ctccttaggg ccaagcgcaa gtccgtgccc accatgcgcg tgggtgtggc tgtcttcgcc cctgtcttcc tgcatttcca cgtcaccgc accctctact actccttccg ctgcctggac ctacagctgcc acacctcaa cgcctcaac atggcctaca aggttaccgg gccgctggcc agtgctaaca gttgccttga cccgtgctc tacttcttg ctgggcaag gctcgtacgc ttggcccgag atgccaagcc accactggc cccagccctg ccacccgcg tgcgccagc ctgggcctgc gcagatccga cagaactgac atgcagagga taggagatgt gttggggcagc agtgaggact tcaggcgagc agatccacg ccggctggta gcgagaacac taaggacatt cggtgttagg	Homo sapiens

Homo  
sapiens

217 3589 Purinergic NP\_002555.1  
Receptor  
P2Y, G-  
protein  
coupled, 2  
(P2RY2)

agcagaacac ttcagcctgt gcaggtttat attgggaagc ttagaggac caggacttgt  
gcagacgcca cagttctccc agatatggac catcagtgac tcatgctgga tgaccccatg  
ctccgtcatt tgacaggggc tcaggatatt cactctgtgg tccagagtca actgttccca  
taacccttag tcatgctttg tgtgtataag ttgggggaat taagtttcaa gaaaggcaag  
agctcaaggt caatgacacc cctggcctga ctcccatgca agtagctggc tgtactgcca  
aggtacctag gttggagtcc agcctaatac agtcaaatgg agaaacaggc ccagagagga  
aggtggctta ccaagatcac ataccagagt ctggagctga gtaccctggg ctggggggcca  
agtcacaggt tggccagaaa accctggtaa gtaatgaggg ctgagtttgc acagtggctc  
ggaatggact gggtgccacg gtggacttag ctctgaggag taccctccagc ccaagagatg  
aacatctggg gactaatatc atagacctat ctggaggctc ccatgggcta ggagcagtg  
gaggctgtaa cttatactaa aggttgtgtt gctgctaaa aaaa  
gagcctgtaa cttatactaa aggttgtgtt gctgctaaa aaaa

NAVALYIFLC P  
FSTVLCKLVR FLFYTNLYCS  
VLCQAPVLY FVTTSGRGR  
MARRLLKPAY GTSGGLPRAK  
LNAINMAYKV TRPLASANS  
SDRTDMQRIG DVLGSSEDFR

218 3595 Purinergic NM\_002563  
Receptor  
P2Y1

ccccctccc cgggggacca gtctgcctgc tcccttccgc tcgtgggctt ttccgatgct A  
tgctgcgcc ctggcgccgc ctgcctctct gcgcctctct accctcggga gcgcgcgcct  
aagtcgagga ggagagaatg accgaggtgc tgtggcgggc tgtcccaac gggacggagc  
ctgccttct ggcgggtccg ggttcgtctc ggggggaacag cacggctgcc tccactgcg  
ccgtctctc gtggttcaaa tgcgccttga ccaagacggg ctccagttt tactacctc  
cggctgtcta catcttggtg ttcatcatcg gcttctgggg caacagcgtg gccatctgga  
tgttctgtct ccacatgaag ccttgagcgc gcactctcgt gtacatgttc aatttggctc  
tgcccgactt ctgtacgtg ctgactctgc cagccctgat ctctactac ttcaataaaa  
cagactggat ctctggggat gccatgtgta aactgcagag gttcatcttt catgtgaacc  
tctatggcag catcttgttt ctgacatgca tcatgcccc ccggtacagc ggtgtggtgt  
acccctcaa gtccctgggc cggctcaaaa agaagaatgc gatctgtatc agcgtgctgg  
tgtggctcat tgtggtggtg gcgactctcc ccactctctt ctactcaggt accggggctc  
gcaaaaaaaa accatcaccc tgttacgaca ccactcaga cgagtacctg cgaagtattt  
tcatctacag catgtgcacg accgtggcca tgttctgtgt ccccttgggt ctgattctgg  
gctgttacgg attaatgtg agagctttga tttaaaaga tctggacaac tctcctctga  
ggagaaaatc gattacctg gtaatcattg tactgactgt ttttgcgtgt tcttacctc  
cttcccatgt gatgaaaacg atgaacttga gggcccggtt tgatttttcag accccagcaa  
tgtgtgcttt caatgacagg gtttatgcca cgtatcaggt gacaaagagt ctagcaagtc  
tcaacagttg tgtggacccc attctctatt tcttggcggg agatactttc agaaggagac  
tctcccgagc cacaaggaaa gcttctagaa gaagtggagg aaatttgcaa tccaagagt  
aagacatgac cctcaatatt ttactctagt tcaagcagaa tggagatata agcctgtgaa  
ggcacaagaa tctccaaaca cctctctgtt gtaatatggt aggatgctta acagaatcaa  
gtacttttcc cctctttaa cctctctgtt tttctagttt agaaaaaaat caaaccaaga aaatagttag

Homo  
sapiens

219	3595	Purinergic Receptor P2Y1	NP_002554.1	MTEVLWPAVP VFIIIGFLGNS DAMCKLQRFI VAISPILFYS VRALIYKOLD RVYATYQVTR ILPEFKQNGD TSL	gaaatgcca gactagaagt ctttaaaaatg tttgatatta ctagccttta tatctagcat ggatctctga tttctttagg tgttttccag gaaaagcctg attttctctg ccccactgct atctgtaaaa aaataaactgt ggttgacagt gggtgggga gaagacattt gcttccacca aaaa	catccacact atgtataata tgcaggcttt gtaatttctc taagaaaact aaaatccaca aaaacactaa ggaagtggtt gcaagtataa tattttcttg catatattat taaacacact gtgcaatgcc acaattttaa tagtaagtgt catccacaag gaagacattt gcttccacca aaaa	tagcttggtt aaacaatact tctgtttaaa taagaaaact aaaatccaca aaaacactaa ggaagtggtt gcaagtataa aaaagtgctc cgtacttgga gagctctctt ttaggacttt gaattgcaaa aagatatattg gcatagcctc tagaatgagg agtggttgaa aaacaaaaat	Homo sapiens
220	3596	Purinergic Receptor P2Y5	NM_005767	ctgatgaaag gctcccaactg tggtgtttgt tcaaagtcog ttgtttttac atttaactttg tcttaacctg ctctaagaac gaggaagtgc aagcctgctt ttttcatcga tggtgctaaa aggttttaaa atatcaatct tggcagcagt ttgaccctat	ctgaaaaattg gactccttta gtatccaatt acaacttaca aggatttttt gtgatgctgt gatcgatttc gcaaagattg tttgttcagt ccagaagcca ttttttattc aaaccagtta aatgattttt tctcttgatg tacctaatca tttacatcgg acacaaattca	gacgtgcctt agtaacactt gtgttgccat tgattaaact acttcacaac tttatacca tggaattgt tttgcactgg ctaccactc catggaaaac ctctaatttt cattaagttag gtacatttga tctcttgatg taccacatca tttacatcgg acacaaattca	tacgatggta gtatgggtgc atacattttc ggcaatgtca acggaattgg catgtacgga ctaccatttt cgtgtgggta tcagggtaac atatctctca aaatgtaact tggttctagta aagcaaaaaa tttctgtttt atgtgttaaa tgctcagtag tgctgtttcc aaaaatgaaaa	Homo sapiens

221	3596	Purinergic Receptor P2Y5	NP_005758.1	actggtctgt caggagaagt gacttcagat tctctgaagt tcatggtgca gagaatttta ttcagcataa cctacagacc ttaaaaagta agatatattga caatgaatct gctgcctgaa ataaaacccat taggactcac tgggacagaa ctttcaag MSDLLFVFTL PFRIFYFTR NWPFGLDLCK ISVMLFYTNM YGSILFLTCI SVDRFLAIVY PFKSKTLRTK RNAKIVCTGV WLTVIGGSAP AVFVQSTHSQ GNNASEACFE NFPEATWTKTY LSRVIFIEI VGFFIPLILN VTCSSMVLKT LTKPVTLSRS KINKTKVLKM IFVHLIIFCF CFVPYNINLI LYSIVRTQTF VNCSSVAAVR TMYPTILCIA VSNCCFDPIV YYFTSDTIQN SIKMKNSVR RSDPRFSEVH GAENFIQHNL QTLKSKIFDN ESAA	Homo sapiens
222	3597	Purinergic Receptor P2Y6	NM_004154	aaggacagag gaggggcccct tcctgtcagc tggctgggag cagaggtggc tttgtctttt A cggaagaact ggtctgtgg aatttgtgct tattccocat caagatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctgggtt tcagatgagt tttctgcttg cctgtcatct ggaatagtgc taaaaatttg caaatgcct tcttgcagt gcttgcctc ttcttcata gacactgat atgtctctca gtttccctcat ctgctgctc tcacagacttc tgccagaaca ttgcacgcga cagtttcagg cacagaactg actggcagca ggggctgctc cacgagtgg aattgtctcc agcacttcac ggactgcaag cgaggcactt gctaaactct ggataacaag acctctgcca gaagaacctat ggctttggaa ggcggagttc aggtgagga gatgggtgag gtcctcagtg agccctgccc tccctgaaca taggaacccc acctgggag ccatgggaatg ggaacaatggc acaggccagg ctctgggctt gccacccacc acctgtgtct accgcgagaa cttcaagcaa ctgtgtctgc cactgtgta ttccggcggtg ctggcggtg gcctgcccgt gaacatctgt gtcattaccc agatctgac tggctgacct gctatatgcc tgcctcctgc gcagggccgt gtacacctta aacctgtctc tggctgacct gctatatgcc tgcctcctgc ccctgtctat ctacaactat gcccaaggtg atcactggcc ctttggcgac ttgcctgccc gcctgggtccg cttcctcttc tatgccaacc tgcacggcag cactcctcttc ctacactgca tcagcttcca gcgtacctg ggcactgccc acccgctggc cccctggcac aaacgtgggg gccgcccggc tgcctggcta gtgtgtgtag ccgtgtggt ggccgtgaca acccagtgcc tgccacacgc catctctgct gccacaggca tccagcgtaa ccgcactgtc tgctatgacc tcagcccgcg tgccttgccc accactata tgcctatgg catggctctc actgtcatcg gcttctgtct gccctttgct gccctgtgg cctgtactg tctcctggcc tgcgcctgt gccgcccagg tggcccggca gacctgtgg ccagagagcg ccgtggcgaag gcggcccgcga tggccgtggt ggtggctgct gcctttgcca tcagcttccct gccttttcc atcaccaga cagcctacct ggcatgccc tcgacgcccg gcgtcccctg cactgtattg gaggccttg cagcggccta caaaggcacg cggccgtttg ccagtgcaca cagcgtgctg gaccccatcc tcttctactt caccagaag agttccgccc ggcgaccaca tgagctccta cagaaactca cagccaaatg gcagaggcag ggtcgtgtgag tccctcaggt cctgggcagc cttcatattt gccatttgtt ccggggcacc agagcccca ccaaccccaa accatgcgga gaattagagt tcagctcagc tgggcatgga gtaagatcc ctacacagac ccagaagctc accaaaaact atttcttcag cccctctctt gcccagacc ctgtgggcat ggagatggac agacctgggc ctggctcttg agaggtcca gtcagccatg gagagctgg gaaaccacat taagtgctc acaaaaaac agtgtgacgt gtactgtcaa aa	Homo sapiens



223	3597	Purinergic Receptor P2Y6	NP_004145.1	MEWNGTGQA LGLPPTTCVY RENFKQLLP PVYSAVLAAG LPLNICVITQ ICTSRPALTR P	Homo sapiens
				TAVYTLNAL ADLLYACSLP LLIYNYAQGD HWPFQDFACR LVRFLFYANL HGSLFLFTCI	
				SFQRYLGICH PLAPWHKRG RRAAWLVCVA VWLAVTTQCL PTAIFAATGI QRNRVTCYDL	
				SPPALATHYM PYGMALTVIG FLPLFAALIA CYCLLACRLC QDGPAPFVA QERRGKAARM	
				AVVVAFAAI SFLPFHITKT AYLAVRSTPG VPCTVLEAFA AAYKGRPEFA SANSVLDPIL	
				FYFTQKKFRR RPHELLQKLT AKWQRQGR	
224	3599	G Protein- Coupled Receptor 23 (GPR23)	NM_005296	cctaccggtc catagtgtca gagtgggtgaa cccctgcagc cagcaggcct cctgaaaaaa A	Homo sapiens
				aagtccatgt gtgacagaag attcatgtgac ttccaattcc aagattcaaa ttcaagcctc	
				agaccagggt tgggcaatgc tactgccaat aatacttgca ttgttgatga ttccctcaag	
				tataatctca atggtgctgt ctacagtggt gtattcatct tgggtctgat aaccaacagt	
				gtctctctgt ttgtcttctg ttccgcagc aaaaatgagaa gtgagactgc tatttttacc	
				accaaactag ctgtctctga ttgtcttttt gtctgtacac taccttttaa aatattttac	
				aacttcaacc gccactggcc ttttgggtgac accctctgca agatctctgg aactgcattc	
				cttaccaca tctatgggag catgctcttt ctacactgta ttagtggga tcgtttcctg	
				gccattgtct atccttttctg atctcgtact attaggacta ggaggaaattc tgccattgtg	
				tgtgctgggt tctggatcct agtccctcagt ggcgggtattt cagcctcttt gtttccacc	
				actaatgtca acaatgcaac caccacctgc ttgaaaggct tctccaaaac gtctctggaag	
				acttatttat ccaagatcac aatatattat gaagtgtgtg ggtttatcat tctctataa	
				ttgaattgtct ctgtctcttc tgtgtgctg agaactcttc gcaagcctgc tactctgtct	
				caaatgggga ccaataagaa aaaagtactg aaaatgatca cagtacatat ggcagtcttt	
				gtggtatgct ttgtacccta caactctgtc ctctcttgt atgccctgggt gcgctcccaa	
				gtattacta attgcttttt ggaagattt gcaagatca tgtaccaat cactctgtgc	
				cttgcaactc tgaactgttg ttttgacct ttoactatt acttaccct tgaatccttt	
				cagaagtctc tctacatcaa tgcccacatc agaattggagt cctgttttaa gactgaaaca	
				cctttgacca caaagccttc ccttccagct attcaagagg aagttagtga tcaaacaca	
				aataatggtg gtgaattaat gctagaatcc accttttagg tatgagaaat gtgttcagggt	
				ccagatatgg ttctcctat aatttttct atgtctataa ctaaaagattt gaagctaattg	
				atactgagaa taatgcacca aatccagtca gatacatctg ttgaaaggta tactgtagag	
				tttttatgct tgtttgttc agtaattata ggtcaaatct aattacaaca accaagatgg	
				attgccaaac tcttctgctt ggttgggaatt tcatgtatc gcattatcca ggtggctagt	
				ggcatttgat aatatagaga tgactttgaa actttcaaaa aggtatttct attccaatga	
				tatttggtaa ttagggtggg cctataaata tagaacaatt cagggtattt ttaaaaaatt	
				gtgttactac tgatatatgc tagttttatt ttattttttt ggactgtcat tgagtttatt	
				ttagcacaag aatattttta gcctaacatt attaataga aatgtgtcaa atttttaaca	
				ttggtaaaa atgttatgtg cattttgaaa acagaaaaa aattgctgtt gcatgtacgt	
				gggtgggaag aaaaagaaaa ttaacaggat ttacacaatt ataataacca gcagtgtgag	
				tttaaaaaac ttcgttgttt ttacaccaa ttaaaatttt catgtcaaac ttcaaaagcca	
				gaaagctgct aaatacgtgt ctggcaggta aaagctggaa aattacttaa aacaggaaaag	
				tgtcaataaa aaaacttgag caacaccaac atattttttc ttaaaatgtc acgttatctt	
				cattttggga aactagggtc tataaaatat ttatcctccc tgttatactt tggagcacag	
				cacagccaga aaggggctgc atttgtgccc aggtcaggag caaattgaaa aaaaaataa	

225	3599	G Protein- Coupled Receptor 23 (GPR23)	NP_005287.1	agtaatacta aaaaatcaaa ctataaaacc aaaacattta ttaaaacctg aattaatcct ttttggagg aggagtagag atataaaacc tgaataatct tattctttct tategaattt tggagcctaa tatagccagg agctgctgaa tttgtgcccc tggattggaa ccaataaaaa aaaaaaaaa aaattcct MGDRRFIDFQ FQDSNSSLRP RLGNATANNT CIVDDSEKYN LNAVYSVVF ILGLITNSVS P LFVFCFRMKM RSETAIFITN LAVSDLLFVC TLPEKIFYNF NRHWPFQDTL CKISGTAFLT NIYGSMLFLT CISVDRLFLAI VYFERSRTIR TRNSAIVCA GWILVLSGG ISASLFTTN VNNATTTCFE GFSKRWKTY LSKITIFIEV VGFIPLILN VSCSSVLRT LRKPATLSQI GTNKKKVLKM ITVHMAVFW CFVPYNSVLF LYALVRSQAI TNCFLERFAK IMYPITLCLA TLNCCFDPEI YYFTLESFQK SFYINAHIRM ESLFKTETPL TTKPSLPAIQ EEVSDQTNN GGELMLESTF	Homo sapiens
226	3638	Parathyroid Hormone Receptor 2 (PTH2)	NM_005048	ggcgggtggc ccgggcccga ccacccagc tgcggtcgt tactggccac agtttgctc A tgggccagcc aagttggcaa cttggaagct tctccgggc tctggaggag ggtccctgct tcttctaca gccgttccgg gcatggccgg gctggggggc tgcctccacg tctggggttg gctaagtctc ggcagctgcc tcttgccag agccagctg gattctgat gcaccattac tatagaggag cagattgtcc ttgtgctgaa agcgaaagta caatgtgaac tcaacatcac agctcaactc caggaggagg aagtaattg ttccctgaa tgggatggac tcatgttg gccagagga acagtgggga aaatatcgc ttgtccatgc cctccttata ttatgactt caaccataaa ggagtgtgctt tccgacactg taaccccaat ggaacatggg attttatgca cagcttaaat aaaacatggg ccaattatc agactgcct cgctttctgc agccagatat cagcatagga aagcaagaat tcttgaacg cctctatgta atgtataccg ttggctactc catctctttt ggttccctgg ctgtggctat tctcatcatt ggttacttca gacgattgca ttgcactagg aactatatcc acatgcactt atttgttct tcatgctga gagctacaag catctttgtc aaagacagag tagtccatgc tcacatagga gtaaaaggagc tggagtcctc aataatgcag gatgaccac aaaattccat tgaggcaact tctgtggaca aatcacataa tatcgggtgc aagattgctg ttgtgatgtt tatttactc ctggctacaa attattattg gatcctggtg gaagtctct accctgcataa tctcatctt gtggctttct ttcgggacac caaatacctg tggggttca tcttgatagg ctgggggtt ccagcagcat ttgttgtagc atgggctgtg gcacgagcaa cttgggtga tgcgaggtgc tgggaactta gtgctggaga catcaaagtgg attatcaag caccgatctt agcagctatt gggctgaatt ttattctgtt tctgaatacg gttagagttc tagctaccaa aatctgggag accaatgcag ttgggcatga cacaaggaag caatacagga aactggccaa atcgacactg gtcctggtcc tagtctttg agtgcattac atcgtgttcg tatgcctgcc tcactcctc actgggctcg ggtgggagat ccgcatgcac tgtgagctct tcttcaactc ctttcagggt tcttttgtgt ctatcatcta ctgctactgc aatggagagg ttcaggcaga ggtgaagaag atgtggagtc ggtggaatct ctccgtggac tggaaaagga caccgcatg tggcagccgc agatgcggct cagtgtcac cacctgacg cacagacca gcagccagtc acaggtggcg gccagcacac gcatggtgct tatctctggc aaagctgcca agatcgccag cagacagcct gacagccaca tcactttacc tggctatgtc tggagtaact cagagcagga ctgcctgcca cactcttcc acgaggagac caagggaagat agtgggagggc agggagatga tattctaag gagaagcctt ccaggcctat ggaatctaac ccagacactg aaggatgcca aggagaaact gaggatgttc tctgaatgga	Homo sapiens

227	3638	Parathyroid Hormone Receptor 2 (PTHr2)	NP_005039.1	<p> catttggtggc tgaactttcat gggctggtcc aatggctggt tgtgtgagag ggcttggtg  atactccat gcttgagttc aaaggctgaa aattcagtta aggtgttact taataatagt  ttttaggctc catgaattgg ctctgtgaaa tactaacgac atgaaaaagc aagtgtcaat  ggagtagttt attaccttct attggcatca agttttctc taaattaatg tatggtattt  gctctgtgat tttcatattt tttctgtctac ttttggtag aaaaagatt caattgcttg  gctgtagctt tctctcatat ataccacct aaataataag aagatctttt agtgtgtatc  atttcccttt tagaaactag tattctctta tttctactt taatgtactt ctatcactgc  atttattttg cctgtgcata ggagcaatta ggtctaaaaa aaatatatgg gaagataaaa  gatctaagaa caagtacttg ctggaaaatt agttggctgg acattgataa aataatgcat  ttataacaat tacatgtgtt ttgggaaca aggaattt ctcaaaaaag aatatttcac  acatcccttc tttgaatgg cctctttgt accagcaga cctcaggtct tcaacttttc  ttctttgtaa accatgtcat gtggaagat ttctcagtt agtgagcttg tgtctgcaaa  ttgattttgt ttgtaatgta tttgatagc aaatcatgct gcactatat ctttttcttg  tttgagctgt tactacattg tacatggcat gtgggatcaa ttaaaaaattt gttttaaaaa  t </p>	Homo sapiens
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	NM_000316	<p> MAGLGASLHV WGLMLGSL LARAQLDSG TITIEQIVL VLKAKVQCEL NITAQLQEGE P  GNCFPEWDGL ICWPRGTGK ISAVPCPPYI YDENHKGVA F RHCPNGTWD FMHSLNKTWA  NYSDCRLRFL PDISIGKEF FERLYVMYTV YSISFGSLA VAILIIGYFR RLHCRTNYIH  MHLFVSEMLR ADSIFVKDRV VHAHIGVKEL ESLIMQDDPQ NSIEATSVDK SQYIGCKYIV  VMFIYFLATN YYWILVEGLY LHNLI FVAFF SDTKYLWGF I LGWGFPAAF VAAWAVARAT  LADARCWELS AGDIKWIYQA PILAAIGLNF ILFLNTVRVL ATKIETNAV GHDRKQYRK  LAKSTLVLVL VFGVHYIVFV CLPHSFTGLG WEIRMHCELF FNSFQGFVVS IICYCNGEV  QAEVKRWMSR WNLSVDWKRT PPCGSRRCGS VLTVTHTSTS SQSQVAASR MVLISGKAAK  IASRQPD SHI TLPGYVWSNS EQDCLPHSFH EETKEDSGRQ GDDILMEKPS RPMESNPDE  GCQGETEDVL </p>	Homo sapiens
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	NM_000316	<p> cggaggagac cggccctagg cggtggtgat ggggaccgcc cggatcgac cggcctggc A  gctcctgctc tgcgtcccg tgcctagctc cgcgtacgcg ctggtggatg cagatgacgt  catgactaaa gaggaacaga tcttctgct gcacctgct caggccaggt gcgaaaaacg  gctcaaggag gtcctgcaga ggcagccag cataatggaa tcagacaagg gatggacatc  tgcgtccaca tcagggaagc ccaggaaaaga taaggcatct gggaaagctct accctgagtc  tgaggaggac aaggaggcac ccactggcag caggtaccga gggcgcccc gtctgcccga  atgggaccac atcctgtgct ggcgctggg ggcaccaggt gaggtggtgg ctgtgccctg  tccggactac atttatgact tcaatcaca aggccatgcc taccgacgt gtgaccgcaa  tggcagctgg gagctggtgc ctgggcacaa caggacgtgg gccaaactaca gcgagtgtgt  caaatcttc accaatgaga ctggtgaacg ggaggtgttt gaccgctgg gcattgatta  caccgtgggc tactccgtgt cctggcgctc cctcaccta gctgtgctca tctggccta  ctttaggcgg ctgcactgca cgcgcaacta catccacatg cactgttcc tgtccttcat  gctgcgcgcc gtgagcatct tgcgtcaagg cgctgtgctc tactctggcg ccacgcttga  tgaggctgag cgctcaccg aggaggagct gcgcgccatc gccaggcgcc ccccgccgc  tgccaccgcc gctgcggct acgcgggctg cagggtggct gtgaccttct tctttactt  cctggccacc aactactact ggattctggt ggaggggctg tacttgaca gcctcatctt </p>	Homo sapiens

229	3640	Parathyroid Hormone Receptor 1 (PTHr1)	NP_000307.1	<p>catggccttc ttctcagaga agaagtacct gtggggcttc acagtcttcg gctggggtct  gcccgtgtc ttctgtgctg tgtgggtcag tgctcagagt accctggcca acaccgggtg  ctgggacttg agctccggga acaaaaagt gatcatccag gtgcccatcc tggcctccat  tgtgtcaac ttcatcctct tcatcaatat cgtccgggtg ctgcccacca agctgcggga  gaccaacgcc ggcgggtgtg acacacggga gcagtaccgg aagctgtctca aatccacgct  ggtgtcatg cccctctttg gcgtccacta cattgtcttc atggccacac catacaccga  ggtctcagg acgtcttgcc tatactgttt ctgcaatggc gaggtacaag ctgagatcaa  ggatttttt gtgcaatga cactggcact ggacttcaag cgaaggcac gcagcgggag  gaaatcttg agccgtgga ccatgggtgc ccacacaagt gtgaccaatg tcggcccccg  cagcagctat agctacggcc ccatgggtgc cctactgcc actgccacca ccaacggcca  tgtgggactc ggcctgcccc tcagcccccg gacccacagc ctggagaccc tcgagaccac  ccctcagctg cctggccatg ccaagccagg gacccacagc ctggagaccc gctcaggcct  accacctgcc atggctgctc ccaaggacga tgggttctc aacggctcct gctcaggcct  ggacgaggag gcctctgggc ctgagcggcc acctgcctg ctacaggaaag agtgggagac  agtcatgtga ccaggcgtg gggcgtggac ctgctgacat agtggatgga cagatggacc  aaaagatggg tgggtgaatg atttccact cagggcctgg ggccaagagg aaaaacaggg  aaaaaagaa aaaaaaaga aaaaggaa</p>	Homo sapiens
230	3732	PACAP Receptor Type 1	NM_001118	<p>VTMKEEQIFL LHRAQAQCEK RLKEVLQRP A  SEEDKEAPTG SRYRGRPCLP EWDHILCWPL  NGSWELVPGH NRTWANYSEC VKFLTNETRE  YFRHLCTRN YTHMLFLSF MLRAVSIFVK  PATAAAGYAG CRVAVTFFLY FLATNYWIL  LPVAFVAVW SVRATLANTG CWDLSSGNKK  ETNAGRCDDR QQYRKLLKST LIVMPLFGVH  QGFVAILYC FCNGEVQAEI KKSWSRWTLA  RVGLGLPLSP RLLPTATTNG HPQLPGHAKP  LDEEASGPER PPALLQEWE TVM</p>	Homo sapiens

231	3732	PACAP Receptor Type 1	NP_001109.1	<p> ggcgatctcc gtcttcataa aagactggat tctgtatgag gagcaggaca gcaaccactg  cttcactctc actgtggaat gtaaggccgt catggttttc ttccactact gtgtgtgtgc  caactacttc tggctgttca tcgaggccgt gtacccttc actctgctgg tggagacctt  ctccctgaa aggagatact tctactggtg cactatcatt ggctgggga ccccaactgt  gtgtgtgaca gtgtgggcta cgctgagact ctacttgat gacacaggct gctgggatat  gaatgacagc acagctctgt ggtgggtgat caaagccct gtggttggt ctatcatggt  taactttgtg ctttttattg gcattatcgt cagaaacttc agtctccaga  catgggaggg aatgagtcca gcatctactt gcgactggcc cggccaccc tgcgtctcat  ccactattc ggaatccact acacagtatt tgccttccc ccagagaaatg tcagcaaaaag  ggaagactc gtgtttgagc tggggctggg ctccttccag ggctttgtgg tggctgttct  ctactgttt ctgaatggtg aggtacaagc ggagatcaag cgaataatggc gaagctggaa  ggtgaaccgt tacttgcgtg tggacttcaa gcaccgacac ccgtctctgg ccagcagtgg  ggtgaatggg ggcacccagc tctccatcct gagcaagagc agtccccaaa tccgcatgtc  tggcctccc gtgacaatc tggccacctg agccatgctc cctc </p>	Homo sapiens
232	3844	Apelin Receptor	NM_005161	<p> VHVSLAALL LLPAPAMHS GRLRKGRAAC KSAAQRHIGA DLPLLSVGGQ WCWPRSVMAG P  WKPAPHVGMV LVSCPELFRI FNPQVWETE TIGESDFGDS NSLDLSDMGV VSRNCTEDGW  SEPFPHYFDA CGDEYESET GDQDYIYLSV KALYTVGYST SLVTLTTAMV ILCFRKLHC  TRNFIHMLNF VSEMLRAISV FIKDWILYAE QDSNHCYFST VEKAVMVFF HYCVVSNYFW  LFIEGLYLFT LLETFFPER RYFYWTIIG WGTPTVCVTV WATLRLYFDD TGCWDMNDST  ALMWVIKGPV VGSIMVNEVL FIGIIVILVQ KLQSPDMGGN ESSIYLRLAR STLLIPLFG  IHYTVFAFSP ENVSKRERIV FELGLGSFQG FVAVLYCFL NGEVQAEIKR KWRSWKVNRV  FAVDFKRRHP SLASSGVNGG TQLSILSKSS SQIRMSGLEPA DNLAT  atggaggaag gtgtgtgatt tgacaactac tatggggcag acaaccagtc tgaagtgtgag A  tacacagact ggaatctc tcgtgtgctc tggaccgtgt ttcggagcag cggggagaaag  ctgggcacca cgggaaacgg tctgtgtc ctacacgtac cgggactatg actggccctt tgggaccttc  aggcgtccac tgtgggtac cctcatcttc gtcaacatgt acgccagcgt cttctgcctc  ttctgcaagc ttagcagcta ctacctggcc atcgtgaggc cagtggccaa tgcctggctg  accggcctca gcttcgaccg cgtggccacg gcagttcttt ggggtgctggc cgccctcctg  aggctgcggg tcagcggggc cgtggccacg cgtggctggtt ggggtgctggc cgccctcctg  gccatgcctg tcatgtgtt acgcaccac cgggacttgg agaaccacac taaggtgcag  tgctacatgg actactccat ggtggccact gtgagctcag agtgggacctg ggaggtgggc  cttgggggtct cgtccaccac cgtgggcttt gtggtgacct tcacctcat gctgacctgt  tacttcttca tgcctcaaac catcgttggc cacttcgca aggaacgcat cgagggcctg  cggaagcggc gccggtgct cagcatcacc gtggtgctgg tgggtgacct tgcctgtgc  tggatgccct accacctggt gaagacgctg tacatgctgg gcagcctgct gcactggccc  tgtgactttg acctcttct catgaacatc tccccctact gcacctgcat cagctacgtc  aacagctgcc tcaacctctt cctctatgcc tttttogacc cccgcttccg ccaggcctgc  acctccatgc tctgctgtgg ccagagcagg tgcgcaggca cctccacacg cagcagtggg  gagaagtacg ccagctactc ttcggggcac agccaggggc ccggcccaaa catggggcaag </p>	Homo sapiens

233	3844	Apelin Receptor	NP_005152.1	tag	ggtggagaac agatgcacga gaaatccatc ccctacagcc aggagaccct tgtggttgac	Homo sapiens
					MEEGGDFDNY YGADNQSECE YTDWKSSGAL IPAIYMLVFL LGTTGNGLVL WTVFRSREK P RRSADIFIAS LAVADLTFW TLPLWATYTY RDYDWPFGTF FCKLSSYLIF VNMVASVFCL TGLSFDRLYA IVRPVANARL RLRVSGAVAT AVLWVLAALL AMPVMVLRRT GDLNTRTKVQ CYMDYSMVAT VSSEWAWEVG LGVSSTTVGF VPFITIMLTC YFFIAQTIAG HFKERIEGL RKRRRLLSII VLVVTFALC WMPYHLVKTL YMLGSLHWP CDFDLFLMNI FPYCTCISYV NSCLNPFLYA FFDPRFRQAC TSMLCGQSR CAGTSHSSSG EKSASYSSGH SQPGPNMGK GGEQMHEKSI PYSQETLVD	
234	3845	Chemokine- Like Receptor 1 (CMKLR1)	NM_004072		gaattcggca cgagtcaggg aagcagcccc ggcggccagc agggagctca ggacagagca A ggctccctcg gaagcctcgg ggtgatagg ggtgtccagc tgcggcgctc tgggggttca gagggggatc ttgaatgaac aaatgaatga actgctttct gggcaaacag ccacagccag aggagcctgt gattggcaga aagaagccag ggtgtgcaag tctccccaac agcctcgagt ggcctgcagt cacagggaac cctcaggaag accttcggg cagagaccag agggaagccc atctctccag cagaactgct tggattttc taccaggagg ctacagggtc tgcaacaatg atagcagaag ctgatggcat ctagagatct aggcctgggac tagcacagca tcacttctac cactttctgt tggtcacagc aactaccat gccagtgcag attcaagggg aggagaaata gagtccactt cttgatggga ggctgacat agaattggagg atgaagatta caacacttcc atcagttacg gtgatgaata cctgattat ttagactcca ttgtggtttt ggaggactta tcccccttgg aagccagggt gaccaggatc ttctctgttg ttggtctacag catcgtctgc ttcctcggga ttctgggcaa tggctctggtg atcatcattg ccaccttcaa gatgaagaag acagtgaaca tggctctggtt cctcaacctg gcagtggcag atttctgtt caacgtcttc ctcccaatcc atatacacta tgcgcacctg gactaacact gggttttcgg gacagccatg tgcaagatca gcaacttctt tctcatccac aacatgttca ccagcgtctt cctgctgacc atcatcagct ctgaccgctg catctctgtg ctctccctg tctgggtccc gaaccaccgc agcgttcgcc tggcttacat ggctgcatg gtcactctggg tcttggtctt ctctctgagt tccccatctc tegtcttccg ggacacagcc aacctgcagt ggaaaatata ctgcttcaac aacttcagcc tgtccacacc tgggtcttcc tegtggcca ctcaactcca aatggacctt gtgggtata gccggcacat ggtggtgact gtcaccgct tctctgttg cttctgtgtc ccagtcctca tcatcacagc ttgctacctc accactgtgt gcaaaactgca gcgcaaccgc ctggccaaga ccaagaagcc ctccaagatt attgtgacca tcatcattac ctctctcctc tgctgggtgc cctaccacac actcaacctc cttagagctcc accacactgc catgctggc tctgtcttca gcctgggttt gccctggcc actgcccctg ccattgcca cagctgcagt aacccattc tgtatgtttt catgggtcag gacttcaaga agttcaaggt ggccctcttc tctgccttg tcaatgtctt aagtgaagat acaggccact ctctctaccc cagccataga agctttacca agatgtcatc aatgaatgag aggacttcta tgaatgagag ggagaccggc atgctttgat cctcactgtg gaaccctca atggactctc tcaaccagg gacaccaag gatattgtct ctgaagatca aggcaagaac ctctttagca tccaccaatt ttcactgcat tttgcatggg atgaacagtg ttttatgctg ggaatctagg gcttggaaac cctttcttct agtggacaga acatgctgtg ttccatacag ccttggacta gcaatttatg cttcttggga ggccagcctt gactgactca aagcaaaaaa ggaagaattc	Homo sapiens

[illegible]

237	3846	Sphingolipid NP_001391.2 Receptor Edg1	catgtaagcg ggatccggttt ttggaattt ggtgaagtc actttgattt ctttaaaaa catcttttca atgaatgtg ttaccattt atatecattg aagccgaat ctgcataag aagccactt tatctaaatg atattagcca ggtcccttg tgctctagga gaaacagaca agcaaaacaa agtgaaaacc aatccgtct tccacttt accaaggag atttcttagc aaatgagtct acaaatatg gcaacaacat ggttatctt gttgtgttaa aagtactttt cttgattttt gaatgtattt gtttcaggaa gaagtattt tatggattt tctaaccgtg gttaactttt ctagaatcca cctcttggt cccttaagca ttactttaac tggtaggaa cgccagaact ttttaagtcca gctattcatt agatagtaat tgaagatatg tataaatatt acaaagaata aaaaatatatt actgtctctt tagtatggtt ttcaagtcaa ttaaacccgag agatgtcttg tttttttaa aagaatagta ttaataaggt ttctgacttt tgtggatcat ttgacacata gctttatcaa cttttaaaca ttaataaact gattttttta aag	Homo sapiens
238	3847	Sphingolipid NP_005226 Receptor Edg3	LENIFVLLTI WKTKFHRPM NYDIIVRHYN YTGKLNISAD KENSIKLTSV VFILICCFII P EGSMFVALSA SVFSLIAIAI ERYITMLKMK LHNGSNFRL FLLISACWVI SLILGGLPIM GWNCSIALSS CSTVLPLYHK HYILFCTTVF TLLLSIVIL YCRIYSLVRT RSRRLTFRKN ISKASRSSEK SLALKTVII VLSVFIACWA PLFILLLDV GCKVKTCIDIL FRAEYFLVLA VLNSGTNP II YTLTNKEMRR AFIRIMSCCK CPSSGDSAGKF KRPIIAGMEF SRSKSDNSSH PQDEGDNPE TIMSSGNVNS SS atggcaactg cctcccgcc gctgtctccag ccggtgcggg ggaacagagac cctgcgggag A cattaccagt acgtgggaa gttggcgcc aggtgaagg aggcctccga ggcagcacg ctcaccacg tgcctctctt ggtcatctgc agcttcacg tcttgagaa cctgatggtt ttgattgcca tctgaaaaa caataaatt cacaaccga tgtactttt cattggcaac ctggctctct gcgacctgt ggcgggcatc gcttaacaag tcaacattct gatgtctggc aagaagacgt tcagcctgtc tcccacggtc tggttctca gggaggcgag tatgttcgtg gcccttggg cgtccacctg cagcttactg gccatcgcca tcgagcggca cttgacaatg atcaaatga ggccttacga cgccaacaag aggcaccgcg tcttctctct gatcgggatg tgctggctca ttgcttcac gctggcgcc ctcgccattc tgggctggaa ctgcctgcac aatctccctg actgctctac catcctgccc ctctactcca agaagtacat tgccttctgc atcagcatct tcacggccat cctgtgacc atcgtgatcc tctacgcacg catctacttc ctggtgaagt ccagcagccg taaggtggcc aaccacaaca actcggagcg gtccatggca ctgctgcgga ccgtggtgat tgtggtgagc gtgttcacg cctgctggtc cccactcttc atcctcttcc tcattgatgt ggcctgcagg gtgcaggcgt gcccatcct cttcaaggct cagtgttca tctgttggc tgtgctcaac tccgccatga acccggtcat ctacacgctg gccagcaagg agatcgggg ggccttcttc cgtctggtct gcaactgcct ggtcagggga cgggggggcc gcgctcacc catccagcct gcgctgacc caagcagaag taaatcaagc agcagcaaca atagcagcca ctctccgaag gtcaaggaa acctgcccc caagacccc tcatcctgca tcatggacaa gaacgcagca cttcagaatg ggtacttctg caactga MATALPPRLQ PVRGNETLRE HYQYVGKLAG RLKEASEGST LTTVLFLVIC SFIVLENLMV P LIAIWNKFK HNRMYFFIGN LALCDLLAGI AYKVNILMSG KTFSLSP TV WFLREGSMFV ALGASTCSLL AIAIERHLM IKNRPYDANK RHRVFLLMG CWLIAFTLGA LPILGNCLH	Homo sapiens
239	3847	Sphingolipid NP_005217.1 Receptor Edg3		Homo sapiens



240	3848	C-C	NM_006641	NLPDCSTILP LYSKKYIAFC ISIFTAILVT IVILYARIYF LVKSSSRKVA NHNNSERSMA LLRTWIVVS VFIACWSPLF ILFLIDVACR VQACPILFKA QWFIVLAVLN SAMNPVIYTL ASKEMRRRAFF RLVCNCLVRG RGARASPIQP ALDPSRSKSS SSNNSSHSPK VKEDLPHTDP SSCIMDKNAA LQNGIFCN	Homo sapiens
		Chemokine Receptor 9		gccccctcatc ccaggcagag agcaaccacag ctcttttcccc agacactgag agctggtggt A gctgctgtgc ccaggagagag ttgcatcgcc ctccacaagc cctattccta acatggctga tgactatgct cctgaaatcca catcttccat ggaagactac gttaaactca acttcactga cttctactgt gagaaaaaca atgtcaggca gtttgcgagc gtttctctcc cacccttgta ctggctcgtg ttcactcgtg gtgccttggt caacagtcct gttatccttg tctactggta ctgcacaaga gtgaagacca tgaccgacat gttctctttg aattggcaa ttgctgacct cctctttctt gtcactcttc ccttctgggc cattgctgct gctgacctg ggaagtcca gaccttcacg tgcaaggtgg tcaacagcat gtacaagatg aacttctaca gctgtgtgtt gctgatcatg tgcatacagc tggacaggta cattgccatt gccaggcca tgagagcaca tacttgagg gagaaaaagg tttgtgtacg caaaatggtt tgctttacca tctgggtatt ggcagctgct ctctgcatcc cagaaatctt atacagccaa atcaaggagg aatccggcat tgctatctgc accatgggtt accctagcga tgagagcacc aaactggaagt cagctgtctt gacctgaag gtcattctgt ggttcttctt tccctcgtg gtcatggctt gctgctatc catcatcatt cacacccctga tacaagccaa gaagtcttcc aagcacaaa gcttaaaagt gaccatcact gtcctgaccg tctttgtctt gtcctcagtt ccctacaact gcattttgtt ggtgcagacc attgacgctt atgcatgtt catctccaac tgtgccgttt ccaccaacat tgacatctgc ttcagggtca ccagaccat cgcctcttc cacagttgcc tgaacctgt tctctatgtt ttgtgggtg agagattccg cgggacttc gtgaaaaccc tgaagaactt gggttgcatc agccaggccc agtgggtttc atttacaagg agagaggga gcttgaagct gtcgtctatg ttgctggaga caacctcagg agcactctcc ctctgagggg tcttctctga ggtgcatggt tcttttgaa gaaatgaga atacagaaac agtttcccca ctgatgggac cagagagagt gaaagagaaa agaaaactca gaaagggatg aatctgaact atatgattac ttgtagtcag aatttgccaa agcaaatatt tcaaaatcaa ctgactagt caggaggctg ttgattggct ctgactgtg atgcccgcga tctcacaagg aggactaagg accggactg tggagcacc tggctttgccc actcgcgga gcatcaatgc cgtgcctct ggaggagccc ttggattttc tccatgcact gtgaacttct gtggcttcag ttctcatgct gcctcttcca aaaggggaca cagaagcact ggctgctgct acagaccgca aaagcagaaa gtttcgtgaa aatgtccatc ttgggaaat ttctacccct gctcttgagc ctgataaacc atgccaggtc ttatagattc ctgactaga acctttccag gcaatctcag acctaatctt cttctgttct ccttgttctg ttctgggcca gtgaaggtcc ttgttctgat ttgaaacga tctgcaggtc ttgccagtga accctggac aactgaccac acccacaagg catccaaagt ctgttggtt ccaatccatt tctgtgtctt gctggaggtt ttaacctaga caaggattcc gcttattctt tggtatggtg acagtgtct tccatggcct gagcaggag attataacag ctgggttcgc aggagccagc ctggccctg ttgtaggctt ttctgttga ttggcacttg ctttgggtcc accgtctgtc tgctccctag aaaaagggtt ggttcttttg gccctcttct tctgagggc cactttattc tgaggaatac agtgagcaga tatgggcagc agccaggtag ggcaaggggg tgaagcgcag gccttgctgg aagctattt acttccatgc ttctcctttt cttactctat	

241	3848	C-C Chemokine Receptor 9	NP_006632.2	MADYGESEST SSMEDYVNFN FTDFYCEKNV VRQFASHFLP PLYWLVEIVG ALGNSLVILV P YWYCTRVKTM TDMFLINLAI ADLLFLVTLF FWAIAAADQW KFQTFMCKV NMYKMFYS CVLLIMCISV DRYIAIAQAM RAHTWREKRL LYSKMVCFTI WVLAALCIP EILYSQIKEE SGIAICTMVY PSDESTKLKS AVLTLKVILG FFLPFVVMAC CYTIIHTLI QAKKSSKHKA LKVTITVTV FVLSQFPYNC ILLVQTIDAY AMFISNCAVS TNIDICFQVT QTIAFFHSCL NPVLYFVGE RFRDLVKTL KNLGCSQAQ WVSFTRREGS IKLSSMLLET TSGALS at	Homo sapiens
242	3849	G Protein- Coupled Receptor GPR1	NM_005279	atggaagatt tggaggaac attatttgaa gaatttgaaa actattccta tgacctagac A tattactctc tggagctctga ttggaggag aaagtcacagc tgggagttgt tcactgggtc tcctgggtgt tatattgttt gctttttgtt ctgggaattc caggaaatgc catcgtcatt tggttcacgg ggctcaagtg gaagaagaca gtcaccactc tgtggttcct caatctagcc attgcggatt tcaattttct tctctttctg cccctgtaca tctcctatgt ggccatgaat ttccactggc cctttggcat ctgggtgtgc aaagccaat ccttactgc ccagttgaac atggttgcca gtgttttttt cctgacagtg atcagcctgg accactatat ccacttgatc catcctgtct tatctcatcg gcacgaacc ctcaagaact ctctgattgt cattatattc atctggcttt tggcttctct aattggcgtt cctgacctgt acttccggga cactgtggag ttcaataatc atactctttg ctataacaat ttccagaagc atgacccctga cctcactttg atcaggcacc atgttctgac ttgggtgaaa ttatcatgt gctatctctt ccttttgcta acaatgagta ttgtctactt gtgtctcatc ttcaaggtga agaagcgaac agtccctgatc tcagtaggc atttctggac aattctggtt gtggttgggt cctttgtggt ttgctggact ccttatcacc tgtttagcat ttgggagctc accattcacc acaatagcta ttccccaccat gtgatgcagg ctggaatccc cctctccact ggtttggcat tcctcaatag ttgcttgaac cccatcctt atgtccta atgtacacact gtgggaagtc agctgtcttg gcacagtga tgaacagctc gagatactca agtacaacact gtgtgtctc ctggaacacag ctcaataa aggaaactcag aaaccaagaa tctgtgtctc ctggaacacag ctcaataa MEDLEETLFE EFENYSYDLD YYSLESDLEE KVQLGVVHVW SILVYCLAFV LGIPGNAIVI P WFTGLKWKKT VTTLWFLNLA IADFIFLLFL PLYISYVAMN FHWPFGIWLC KANSFTAQLN MFASVFFLTV ISLDHYIHLI HPVLSHRHRT LKNSLIVIF IWLLASLIGG PALYFRDTVE FNNHTLCYNN FOXHDPDLTL IRHVLTVWK FIIGYLFPL TMSICYLCIL FKVKKRTVLI SSRHFWTILV VVVAFVVCWT PYHLFSIWEL TIHNSYSHH VMQAGIPLST GLAFLNSCLN PILYVLISKK FQAREFSSVA EILKYTLWEV SCSGTVSEQL RNSETKNICL LETAQ atggcctcat cgaccactcg gggccccagg gtttctgact tattttctgg gctgccgccg A gcggtcacaa ctcccgccaa ccagagcgca gaggcctcgg cgggcaacgg gtccgtggct ggcgggacg ctccagccgt cagcccttc cagagcctgc agctgggtgca tcagctgaag gggctgatcg tgcgtctcta cagctcgtg gtggtcgtgg ggctgggtgg caactgcctg ctgggtgctgg tgatcgcgcg ggtgcgccg ctgcacaacg tgacgaactt cctcatcgcc aacctggcct tgcctgacgt gctcatgtgc accgcctcgg tgccgctcac gctggcctat	Homo sapiens
243	3849	G Protein- Coupled Receptor GPR1	NP_005270.1		Homo sapiens
244	3850	G Protein- Coupled Receptor 10 (GPR10)	NM_004248		Homo sapiens

245	3850	G Protein- Coupled Receptor 10 (GPR10)	NP_004239.1	<p>gacctcagc cagcgggctg ggtgttcggc ggcgggcctgt gccacctggt cttcttcctg  cagccggtca ccgtctatgt gtggtgtgtc acgctacca ccatgcagat ggaccgtac  gtcgtgctgg tgcacccgct gagcgggcgc atctcgtgc gcctcagcg ctagctgtg  ctggccatct gggcgctgtc cgcggtgctg tgcgtgccg cgcctgtga cactatcac  gtggagctca agccgacga cgtgcgctc tgcgagagt tctggggc cagagcg  cagccagc tctacgctg gggcgctg cgtgtcact acctgtccc tctgctggtc  atcctcctgt cttacgtccg ggtgtcagt aagctccga accgctggt gccgggctg  gtgacccaga gccagggcga ctgggacgc gtccggcgcc ggcgacatt ctgctgtgtg  gtggtggtcg tgggtgtgtt cgcgctgc tgggtgccg tgcacgtct caacctgtg  cgggacctcg accccacgc catgacct tacgctttg gctggtgca gctgctgtc  cactggtcg ccatgagttc ggctgtctac aaccttca tctacgctg gctgacgac  agcttcgcg aggagctgc caaactgtg gctgcttgc ccgcaagat agcccccat  ggccagaata tgacctcag cgtggtcatc tga</p>	Homo sapiens
				<p>GLIVLLYSV VVGLVGNCL LVLVIARVR LHNVNFIIG NLALSDVLMC TACVPLTLAY  AFEPGRWVFG GGLCHLVFFL QPVTVVSVF TLTTIADRY VLVHPLRRR ISRLSAYAV  LAIWALSAVL ALPAAVHTYH VELKPHDVRL CEEFWGQER QRQLYAWGLL LVTYLLPLLV  ILLSYVRVSV KLNRVVPFC VTQSQADWDR ARRRTEFCLL VVVVWFAVC WPLPHVFNLL  RDLDPHAIDP YAFGLVQLLC HWLAMSSACY NPFIYAWLHD SFREELRKL VAWPRKIAPH  GQNMTVSUVI</p>	
246	3851	G Protein- Coupled Receptor GPR12	NM_005288	<p>atgaatgaag acctgaaggt caattaaagc gggctgcctc gggattattt agatgcgct A  gctcggaga acatctcggc tgctgtctcc tcccggttc ctgcgtaga gccagagcct  gagctcgtag tcaacccctg ggacattgtc ttgtgtacct cgggaacctt catctcctg  gaaaatgcca ttgtgtcct tatcatctc cacaacccca gcctgcgagc acctgttc  ctgctaatag gcagcctggc tcttcagac ctgctggcg ccatgggact catcaccaat  ttgtttttg cctacctgct tcagtcagaa gccaccaagc tggtcacgat cggcctcatt  gtcgcctctt tctctgcctc tgctgcagc ttgtgggcta tcaactgtga ccgctacctc  tcactgtact acgctctgac gtacattcg gagaggacgg tcaactttac ctatgtcatg  ctcgtcatgc tctgggggac ctccatctgc ctggggctgc tgcccgctcat gggctggaac  tgctccgag acgagtcac ctgcagcgtg gtcagaccgc tcaccaagaa caacgcggcc  atcctctcg tgctctctt cttcatgtt gcgctcatg ttcagctcta catccagatc  tgtaagattg tgatgaggca cgcctcatg atagcctgc agcacatt cctggccacg  tcgactatg tgaccacccg gaaaggggtc tccacctgg ctatcatcct ggggacgttt  gctgcttgc gtagccttt cacctctat tcttgatag cggattacac ctacccctcc  atctatacct acgccacct cctgccgc accataatt ccatcatcaa ccctgtcata  tatgctttca gaaaccaaga gatccagaaa gcgctctgtc tcatgtgtg cggctgcatc  ccgtccagtc tgcgccag agcgcgctc cccagtgat tgtag</p>	Homo sapiens
247	3851	G Protein- Coupled Receptor GPR12	NP_005279.1	<p>MNEDLKNLS GLPRYLDAA AENISAAS SRPAVEPEP ELVNPWDIV LCTSGTLISC P  ENAIIVLIIF HNPSLRAPME LLIGSLALAD LLAGIGLITN FVFAYLLQSE ATKLVITGLI  VASFSASVCS LLAITVDRYL SLYALTYHS ERTVTFTYM LVMLWGTSLC LGLLPVMGWN  CLRDESTCSV VRPLTKNAA ILSVSFLMF ALMLQYIQI CKIVMRHAHQ IALQHHFLAT</p>	Homo sapiens

248	3852	CX3C Chemokine Fractalkine Receptor 1	NM_001337	SHYVTRKGV STLAIILGTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYNSIINPVI YAFRNQEIQK ALCLICCGCI PSSLAQRARS PSDV ggggcagatc cagattccct ttgcagtcca cgccaggcct tcaccatgga tcagttccct A gaatcagatga cagaaaactt tgagtacgat gatttggctg aggcctgtta tatgggggac atcgtggctc ttgggactgt gttcctgtcc atattctact cgcgtcatctt tggcattggc ctgggggaa atttgttggg agtgtttggc tctaccaaca caagaagcc caagagtgtc accgacattt acctcctgaa cctggccttg ctgatctgc tgtttgtagc cactttgccc ttctggactc actatttgat aaatgaaaag ggccctccaca atgccatgtg caaattcact accgcttct tcttcacgtg cttttttgga agcatattct tcatcacgt catcagcatt gataggtacc tggccatcgt cctggcgcgc aactccatga acaaccggac cgtgcagcat ggcgtcacca tcagcctagg cgtctgggca gcagccattt tgggtggcagc acccagttc atgttcacaa agcagaaaaga aaatgaatgc cttggtgact acccgaggt ccttcaggaa atctggcccg tgctccgcaa tgtggaacaa aattttcttg gttcctact cccctgctc attatgagtt attgctactt cagaatcacc cagacgtgt tttcctgcaa gaaccacaag aaagccaaaag ccattaaact gatccttctg gtggtcatcg tgttttctt cttctggaca ccctacaacg ttatgatattt cctggagacg cttaaagtct atgacttctt tcccagttgt gacatgagga aggatctgag gctggccctc agtggtactg agcgggttg attagacct tgttgccctga atcctctcat ctatgcattt gctggggaga agttcagaag atacctttac cacctgtatg gaaaatgcct ggctgtcctg tgtgggcgt cagtcacgt tgatttctc tcactgtaac cacaaggag caggcatgga agtgttctga cgagcaattt tacttaccac acgagtgatg gagatgcatt gctcctctc tgaagggaat cccaaagcct tgtgtctaca gagaacctgg agtctctgaa cctgatgctg actagtggag agatttttg ttgttatttc ttacaggcac aaaaatgatg acccaatgca cacaacacaa ccttagagtg ttgttgagaa ttgtgctcaa aatttgaaga atgaacaaat tgaactctt gaatgacaaa gtagtagacat ttctcttact gcaaatgtca tcagaacttt ttggtttgca gatgacaaaa attcaactca gactagtta gtaaatgag ggtggtgaat attgttcata ttgtggcaca agcaaaaagg gtgtctgagc cctcaaatg aggggaacca ggccctgagc caagcta NP_001328.1 MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LUVFALTNSK P KPKSVTDIYL LNLAISDLIF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVITIS LGVWAAALIV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTNPLGF LLPLLLMSYC YFRIIQTLFS CKNHKKAKAI KLILLVVIVE FLFWTPYNVM IFLETILKYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRLYHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NTTYHTSDGD ALLLL atggaccag aagaaactc agttatttg gattattact atgctacgag cccaaactct A gacatcagg agaccactc ccatgttctt tacacctgt tcttcttcc agtcttttac acagctgtgt tctgactgg agtctgggg aacctgttc tcatgggagc gttgcatttc aaaccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgactc attttcttg tcacattgcc tctctgggtg gataaagag catctctagg actgtggagg acgggctcct tctgtgcaa agggagctcc tacatgactt ccgtcaatat gcactgcagt gtcctcctgc tcaattgcat gagtgttgac cgtacctgt ccatgtgtg gccagtcgta tccaggaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens
249	3852	CX3C Chemokine Fractalkine Receptor 1	NP_001328.1	SHYVTRKGV STLAIILGTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYNSIINPVI YAFRNQEIQK ALCLICCGCI PSSLAQRARS PSDV ggggcagatc cagattccct ttgcagtcca cgccaggcct tcaccatgga tcagttccct A gaatcagatga cagaaaactt tgagtacgat gatttggctg aggcctgtta tatgggggac atcgtggctc ttgggactgt gttcctgtcc atattctact cgcgtcatctt tggcattggc ctgggggaa atttgttggg agtgtttggc tctaccaaca caagaagcc caagagtgtc accgacattt acctcctgaa cctggccttg ctgatctgc tgtttgtagc cactttgccc ttctggactc actatttgat aaatgaaaag ggccctccaca atgccatgtg caaattcact accgcttct tcttcacgtg cttttttgga agcatattct tcatcacgt catcagcatt gataggtacc tggccatcgt cctggcgcgc aactccatga acaaccggac cgtgcagcat ggcgtcacca tcagcctagg cgtctgggca gcagccattt tgggtggcagc acccagttc atgttcacaa agcagaaaaga aaatgaatgc cttggtgact acccgaggt ccttcaggaa atctggcccg tgctccgcaa tgtggaacaa aattttcttg gttcctact cccctgctc attatgagtt attgctactt cagaatcacc cagacgtgt tttcctgcaa gaaccacaag aaagccaaaag ccattaaact gatccttctg gtggtcatcg tgttttctt cttctggaca ccctacaacg ttatgatattt cctggagacg cttaaagtct atgacttctt tcccagttgt gacatgagga aggatctgag gctggccctc agtggtactg agcgggttg attagacct tgttgccctga atcctctcat ctatgcattt gctggggaga agttcagaag atacctttac cacctgtatg gaaaatgcct ggctgtcctg tgtgggcgt cagtcacgt tgatttctc tcactgtaac cacaaggag caggcatgga agtgttctga cgagcaattt tacttaccac acgagtgatg gagatgcatt gctcctctc tgaagggaat cccaaagcct tgtgtctaca gagaacctgg agtctctgaa cctgatgctg actagtggag agatttttg ttgttatttc ttacaggcac aaaaatgatg acccaatgca cacaacacaa ccttagagtg ttgttgagaa ttgtgctcaa aatttgaaga atgaacaaat tgaactctt gaatgacaaa gtagtagacat ttctcttact gcaaatgtca tcagaacttt ttggtttgca gatgacaaaa attcaactca gactagtta gtaaatgag ggtggtgaat attgttcata ttgtggcaca agcaaaaagg gtgtctgagc cctcaaatg aggggaacca ggccctgagc caagcta NP_001328.1 MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LUVFALTNSK P KPKSVTDIYL LNLAISDLIF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVITIS LGVWAAALIV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTNPLGF LLPLLLMSYC YFRIIQTLFS CKNHKKAKAI KLILLVVIVE FLFWTPYNVM IFLETILKYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRLYHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NTTYHTSDGD ALLLL atggaccag aagaaactc agttatttg gattattact atgctacgag cccaaactct A gacatcagg agaccactc ccatgttctt tacacctgt tcttcttcc agtcttttac acagctgtgt tctgactgg agtctgggg aacctgttc tcatgggagc gttgcatttc aaaccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgactc attttcttg tcacattgcc tctctgggtg gataaagag catctctagg actgtggagg acgggctcct tctgtgcaa agggagctcc tacatgactt ccgtcaatat gcactgcagt gtcctcctgc tcaattgcat gagtgttgac cgtacctgt ccatgtgtg gccagtcgta tccaggaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens
250	3853	G Protein- Coupled Receptor GPR15	NM_005290	SHYVTRKGV STLAIILGTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYNSIINPVI YAFRNQEIQK ALCLICCGCI PSSLAQRARS PSDV ggggcagatc cagattccct ttgcagtcca cgccaggcct tcaccatgga tcagttccct A gaatcagatga cagaaaactt tgagtacgat gatttggctg aggcctgtta tatgggggac atcgtggctc ttgggactgt gttcctgtcc atattctact cgcgtcatctt tggcattggc ctgggggaa atttgttggg agtgtttggc tctaccaaca caagaagcc caagagtgtc accgacattt acctcctgaa cctggccttg ctgatctgc tgtttgtagc cactttgccc ttctggactc actatttgat aaatgaaaag ggccctccaca atgccatgtg caaattcact accgcttct tcttcacgtg cttttttgga agcatattct tcatcacgt catcagcatt gataggtacc tggccatcgt cctggcgcgc aactccatga acaaccggac cgtgcagcat ggcgtcacca tcagcctagg cgtctgggca gcagccattt tgggtggcagc acccagttc atgttcacaa agcagaaaaga aaatgaatgc cttggtgact acccgaggt ccttcaggaa atctggcccg tgctccgcaa tgtggaacaa aattttcttg gttcctact cccctgctc attatgagtt attgctactt cagaatcacc cagacgtgt tttcctgcaa gaaccacaag aaagccaaaag ccattaaact gatccttctg gtggtcatcg tgttttctt cttctggaca ccctacaacg ttatgatattt cctggagacg cttaaagtct atgacttctt tcccagttgt gacatgagga aggatctgag gctggccctc agtggtactg agcgggttg attagacct tgttgccctga atcctctcat ctatgcattt gctggggaga agttcagaag atacctttac cacctgtatg gaaaatgcct ggctgtcctg tgtgggcgt cagtcacgt tgatttctc tcactgtaac cacaaggag caggcatgga agtgttctga cgagcaattt tacttaccac acgagtgatg gagatgcatt gctcctctc tgaagggaat cccaaagcct tgtgtctaca gagaacctgg agtctctgaa cctgatgctg actagtggag agatttttg ttgttatttc ttacaggcac aaaaatgatg acccaatgca cacaacacaa ccttagagtg ttgttgagaa ttgtgctcaa aatttgaaga atgaacaaat tgaactctt gaatgacaaa gtagtagacat ttctcttact gcaaatgtca tcagaacttt ttggtttgca gatgacaaaa attcaactca gactagtta gtaaatgag ggtggtgaat attgttcata ttgtggcaca agcaaaaagg gtgtctgagc cctcaaatg aggggaacca ggccctgagc caagcta NP_001328.1 MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LUVFALTNSK P KPKSVTDIYL LNLAISDLIF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVITIS LGVWAAALIV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTNPLGF LLPLLLMSYC YFRIIQTLFS CKNHKKAKAI KLILLVVIVE FLFWTPYNVM IFLETILKYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRLYHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NTTYHTSDGD ALLLL atggaccag aagaaactc agttatttg gattattact atgctacgag cccaaactct A gacatcagg agaccactc ccatgttctt tacacctgt tcttcttcc agtcttttac acagctgtgt tctgactgg agtctgggg aacctgttc tcatgggagc gttgcatttc aaaccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgactc attttcttg tcacattgcc tctctgggtg gataaagag catctctagg actgtggagg acgggctcct tctgtgcaa agggagctcc tacatgactt ccgtcaatat gcactgcagt gtcctcctgc tcaattgcat gagtgttgac cgtacctgt ccatgtgtg gccagtcgta tccaggaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens

251	3853	G Protein- Coupled Receptor GPR15	NP_005281.1	MDPEETSVYL KPGSRRLIDI VLLLTMSVD PYCAEKKATP KIIFIVVAAF IYYIFDSYIR	DYYVATSPNS FIINLAASDF RYLAIVWPVV IKLIWSLVAL LVSWLPENTE RAIVHCLCPC	DIRETHSHVP IFLVTLPIMV SRKFRRTDCA IVTFEVPLLS KFLAIVSGLR LKNYDFGSST	YTSVFLPVFY DKEASLGLMR YVVCASIWFI IVTCYCCIAI QEHYLPSSAIL ETSDSHLTKA	TAVFLTGVLG TGSFLCKGSS SCLLGLPTLL KLCAHYQQSG QLGMEVSGPL LSTFIHAEDF	NLVLGMALHF YMISVNMHCS SRELTLIDDK KHKKLKKSI AFANSCVNP ARRRKRVSLS	Homo sapiens
252	3854	G Protein- Coupled Receptor GPR18	NM_005292	gaaagagaca ctggaaaacta acactgtttc agtgggaagt agtatcatgc cccttttaac tatcttcata caagaagaga tataatgact gtacttctgc tcttgccctt acttaaaaaac cacgaccacc ctgcctcaag actgacattt tcataatctc aaggatcatc tttcgctttc caccttcctc acaattttcag cagaaaaagt atgaataata cgtcaatgga ttatcttcat	aagcagcaat ctttttaag cagaaaagc ctgaaaaat ctaccaaca agctcacatc attggattat accacggtaa ttacccttc cagattcttg attagtgtg acgtgcaaa cctctgctac atttctgaca tttttcttga cttcacggca atcacgtgc ctgatgctgg atgaacctca gctcagagta ttccgatctg gtagctctacg atttcaatcc aataactatca ataactatca agtcctttt aaaaaaaaa	ttaaagtcagc taaagtccagc tataatgata tctgtgtgatt gcatatccgt ttagtgcatt gtagtgcatt				

253	3854	G Protein- Coupled Receptor GPR18	NP_005283.1	MITLNNQDQP MMNVALVDLI MAIVQPKYAK LKAVNVNLIT VLVCFMPFHI MLYRNYLRSM aattaagaga tttgattatt acctctgcca aacagacctt gattctgtgg taggaggact catcagcgtt gggtagtgca ctacgtttct caaggtgtcc ctttgtgacc cctccctctc gattccatct aggcacagat aactatcaag ttagctcag agctatcaca taatgccaat ccgaagcaat catttcagaa tgacagagaa tttgtctaa taaaaacaga tttgtaaaat	VPENSHPEDE FIMTLPRMF ELKNTCKAVL RLTFFFLIPL CFAFLMLGTG RRKSRSGSL aaaaaagtga cctacacttc agccaatacc cactatgtgc ttgttttcta cagttactcca gccagcacgc acgtgcaagg ctctccatct agagaaaaag cctgtgctct tcttggaag gtcctcataa gcccgaacgg atgttctcta ctatggcacc tgatatcctt ttagttcttc ggatgaaaga tcacaacaag tgcccaaaac aaaagcttgc tttcaattgt agctattttac gcattcattt gtttactgt	YKIAALVFYS YYAKDEWPF ACVGVWIMTL FIMIGCYLVI ENSYNPWGAF RSLSNINSEM L tgctcacaga atgtggtttt tgatgcccc tgatggaatt tgaaacccgg tcttcggcaa ccaaactactt ctttcgtcct ttgtgcgata gcatagaccg ccaagaaaaat ttttctatgg gcactgccta ttttatttta tgaggaggac aatgaacatt gtttaaaatct cctatgcttgc cccatgaaca agctatataag ttagttcttc agcctctaaa gactttttgc ttcaaggatg tattaccaaa ttggcccatt aaaagcttgc tatgcaccag agattaaaaa tcactcaact gtttactgt	CIFIGLFVN EYFCQILGAL TTTTPLLLLY IHNLLHGRTS TTFMLNLSTC L tgctcacaga atgtggtttt tgatgcccc tgatggaatt tgaaacccgg tcttcggcaa ccaaactactt gttggtctcc gtccagttc ttttcaatat gtttcacacc gattgcggca ctccaactgg cactgtcatc ccttcttgg ataaaaatata gtccctcgga ctctcctggc aaaagtctcc cctactctgt atgtcctcta tgaaatgta gctttttgc ttcaaggatg gcttcgactc aactcaaatc agattaaaaa gcttttaacta tcactcaact ttccaaggga aatgttttat	Homo sapiens		
254	3855	G Protein- Coupled Receptor GPR19	NM_006143	aaattaagaga tttgattatt acctctgcca aacagacctt gattctgtgg taggaggact catcagcgtt gggtagtgca ctacgtttct caaggtgtcc ctttgtgacc cctccctctc gattccatct aggcacagat aactatcaag ttagctcag agctatcaca taatgccaat ccgaagcaat catttcagaa tgacagagaa tttgtctaa taaaaacaga tttgtaaaat	VPENSHPEDE FIMTLPRMF ELKNTCKAVL RLTFFFLIPL CFAFLMLGTG RRKSRSGSL aaaaaagtga cctacacttc agccaatacc cactatgtgc ttgttttcta cagttactcca gccagcacgc acgtgcaagg ctctccatct agagaaaaag cctgtgctct tcttggaag gtcctcataa gcccgaacgg atgttctcta ctatggcacc tgatatcctt ttagttcttc ggatgaaaga tcacaacaag tgcccaaaac aaaagcttgc tttcaattgt agctattttac gcattcattt gtttactgt	YKIAALVFYS YYAKDEWPF ACVGVWIMTL FIMIGCYLVI ENSYNPWGAF RSLSNINSEM L tgctcacaga atgtggtttt tgatgcccc tgatggaatt tgaaacccgg tcttcggcaa ccaaactactt gttggtctcc gtccagttc ttttcaatat gtttcacacc gattgcggca ctccaactgg cactgtcatc ccttcttgg ataaaaatata gtccctcgga ctctcctggc aaaagtctcc cctactctgt atgtcctcta tgaaatgta gctttttgc ttcaaggatg gcttcgactc aactcaaatc agattaaaaa gcttttaacta tcactcaact ttccaaggga aatgttttat	CIFIGLFVN EYFCQILGAL TTTTPLLLLY IHNLLHGRTS TTFMLNLSTC L tgctcacaga atgtggtttt tgatgcccc tgatggaatt tgaaacccgg tcttcggcaa ccaaactactt gttggtctcc gtccagttc ttttcaatat gtttcacacc gattgcggca ctccaactgg cactgtcatc ccttcttgg ataaaaatata gtccctcgga ctctcctggc aaaagtctcc cctactctgt atgtcctcta tgaaatgta gctttttgc ttcaaggatg gcttcgactc aactcaaatc agattaaaaa gcttttaacta tcactcaact ttccaaggga aatgttttat	Homo sapiens		
255	3855	G Protein- Coupled Receptor GPR19	NP_006134.1	MVFAHRMDNS KPGEVATASI FVLLQFTTGR KMIAASWIF LFYQKVIKVI HEQDYKKSSL TTSSRMAKN	KPHLIPTLL FFGILWLFSI WTLSATCKV DAGFVTPVLF WRIGTDGRTV VFTAITWISF YVGISEIPSM acggagggcca tcggctgagc ttccaaccca ctggccaccc	VPLQNRSCTE FGNSLVCLVI VRYFYLTGP FYGSNWDSC RTMNIVPRT SSSASKPTLY AKTITKDSIY DSFDREAKEK KLAWPINSNP cagagcaggt cactgcccga gtgtctccct acctggcagc	TATPLPSQYL HRSRRQSTT VQIYVLLSIC NYFLPSSWEG KVTKIMFLI SIYNANFRRG MKETFCMSSM KCYRSNAYTI PNTFV ttcctggggc gctttgctac gacctgggt ccgacgcgca	MELSEHSWM NYFVVSMA IDRFYTIYV TAYTVIHLV LNLLFLLSWL MKETFCMSSM KCYRSNAYTI PNTFV gggatgaaga tccaggcctt tggccggcaa ccacctctgc	Homo sapiens	
256	3856	G Protein- Coupled Receptor GPR2/CCR10	NM_016602	agagatgggg ggacgcatac cagccgggcc tggcctggtc	acggagggcca tcggctgagc ttccaaccca ctggccaccc	cagagcaggt cactgcccga gtgtctccct acctggcagc	ttcctggggc gctttgctac gacctgggt ccgacgcgca	cattactctg aagggcagtg gcgctgggtc gcgctgctgc	gggatgaaga tccaggcctt tggccggcaa ccacctctgc	Homo sapiens

[illegible]

259	3857	G Protein- Coupled Receptor GPR20	NP_005284.1	ctcagtgccg gccctcaagc cctcaccag gccctggcta atggggcccg ggccttag GAIFLAGIVL NGLALVFCC RTRAKTPSVI YTNLVVTDL LVGLSLPTRF AVYGGARGCL RCAFPHVLYG FLNMHCSILF LTCICVDRL AIVRPEAPAA CRQPACARAV CAFVWLAAGA VTLVLGVG SRPCRVFAL TVLEFLPLL VISVFTGRIM CALSRPGLLH QGRQRRVRAM QLLLTVLIIF LVCFFPHAR QVAVALWPDH PHHTSLVVYH VAVTLSSLNS CMDPIVYCFV TSGFOATVRG LFGHGEREP SSGDVSMHR SSKGSGRHHI LSAGPHALTQ ALANGPEA	Homo sapiens
260	3858	G Protein- Coupled Receptor GPR21	NM_005294	atgaactcca ccttgagatgg taatcagagc agccaccctt ttgacctctt ggcatttggc A tatttggaaa ctgtcaattt ttgccttttg gaagtattga tttattgtctt tctaactgta ttgattattt ctggcaacat cattgtgatt ttgtatttc actgtgcacc ttgttgaac catcacacta caagtattt taccagact atggcatatg ctgacctttt tgttggggtg agctgcgtgg tccctctctt atcactctc catcacccc tccagtaga ggagtccttg acttgccaga tatttgggtt ttagtatca gttctgaaga gcgtctccat ggccttctctg gcctgtatca gcattgtag atacattgcc attactaac ctttaacctt taatactctg gttacacctt ggagactacg cctgtgtatt ttccgtattt ggctatactc gaccttggtc ttcctgcctt cctttttoca ctggggcaaa cctggatc atggagatgt gtttcagttg tgtgcggagt cctggcacac cgactcctac ttaccctgt tcatcgtgat gatgttat gcccagcag ccttattgt cttctcacc ttttcaaca tcttcgcgat ctgccaacag cacacaaagg atatcagcga aaggcaagcc gccttcaaga gccagagtgg ggagactggg gaagtgcagg cctgtcctga taagcgctat gccatgttcc tgttctgaat cactagtgtg ttttacatcc tctggttgc atatatcatc tacttcttgg tggaaagctc cactggccac agcaaccgct tgcctcctt cttgaccacc ttgcttggta ttagtaacag tttctgcaac tgtgtaatt atagctctc caacagtgt tccaaagag gactaaagcg cctctcaggg gctatgtgta cttctgtgc aagtcagact acagccaag acccttacac agttagaagc aaaggccctc ttaatggatg tcatatctga	Homo sapiens
261	3858	G Protein- Coupled Receptor GPR21	NP_005285.1	EVLIIVFLTV LIISGNIIVI FVFHCAPLIN P HHTTSYFIQT MAYADLFVG SCWVPSLSLL HHPLPVEESL TCQIFGFWS VLKSVSMASL ACISIDRYIA ITKPLTYNTL VTPWRLRLCI FLIWLYSTLV FLPSFFHWGK PGYHGDVFWQ CAESWHTDSY FTLFVMMLY APAALIVCFY YFNIFRICQQ HTKDISERQA RFSSQSGETG EVQACPDKRY AMVLFRTSV FYILWLPYII YFLESSTGH SNRFASFLT WLAISNSFCN CVIYSLNSV FQGLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI atgtgttttt cctccattct ggaatcaac atgcagctcg aatctaacat tacagtgcga A gatgacattg atgacatcaa caccaatag taccaaccac tatcatatcc gttaaagctt caagtgtctc tcaccggatt tcttatgta gaaattgtg tggacttgg cagcaacctc actgtattgg tactttactg catgaaatcc aacttaatca actctgtcag taacattatt acaatgaatc tcatgtact ttagtgaata atttgtgtgg gatgtattcc tctaactata gttatccttc tgccttccat ggagagtaac actgctcctc ttgtctgttt ccatgaggct tgtgtatctt ttgcaagtgt ctcaacagca atcaacggtt ttgtctatcac ttgtgacaga tatgacatct ctgtaaaacc tgcaaaccca attctgacaa tgggcagagc tgtaattgta atgatatcca ttggattttt ttctttttc tcttctcta ttcttttat tgaggtaaat	Homo sapiens
262	3859	G Protein- Coupled Receptor GPR22	NM_005295		Homo sapiens



263	3859	G Protein- Coupled Receptor GPR22	NP_005286.1	<p>tttttcagtc ttcaaaagtgg aaatacctgg gaaaaacaaga cacttttatg tgtcagttaca  aatgaatact aactgaact gggaatgtat tatcacctgt tagtacagat cccaatattc  tttttcactg ttgtagtaat gtaatacaca tacaccaaaa tacttcaggc tcttaattat  cgaataggca caagattttc aacaggggcag aagaagaaaag caagaaaaga aaagacaatt  tctctaacca cacaacatga ggctacagac atgtcacaaa gcagtgggtg gagaaatgta  gtctttgtg taagaacttc agtttctgta ataattgccc tccggcgagc tgtgaaacga  cacgtgaac gacgagaaa gacaaagaga gtcttcagga tgtctttatt gattatttct  acatttcttc tctgctggac accaatttct gttttaata ccaccatttt atgtttaggc  ccaagtgacc ttttagtaaa attaagattg tgttttttag tcatggctta tggaaacaact  atatttcacc ctctattata tgcattcact agacaaaaat ttcaaaagt cttgaaaaagt  aaaatgaaaa agcgagttgt ttctatagta gaagctgac ccctgcctaa taatgctgta  atacacaact ctggataga tcccaaaaaga acaaaaaaaa ttacctttga agatagtga  ataagagaaa aacgttttagt gcctcaggtt gtacagagact ag</p>	Homo sapiens
				<p>MCFSPILEIN MQESNITVR DDIDDINTNM YQPLSYPLSF QVSLTGFLML EIVLGLGSNL P  TVLVLYCMKS NLINSVSNII TMNLHVLVDI ICVGCIPITI VILLSLESN TALICCFHEA  CVSFASVSTA INVFAITLDR YDISVKPANR ILTMGRAVML MISIWIFSF SFLIPFIEVN  FFSLOSGNTW ENKTLICVST NEYTELGMV YHLLVQIPF FFTVVMMLT YTKILQALNI  RIGTRFSTGQ KKKARKKKTI SLTQHEATD MSQSSGGRN VFGVRTSVSV IIALRRRAVKR  HRERRERQKR VFMSSLLIIS TFLLCWTPIS VLNTILCLG PSDLLVKLRL CFLVMAYGTT  IFHPLLYAFT RQKFQVLKS KMKKRWVSIV EADPLPNNAV IHNSWIDPKR NKKITFEDSE  IREKRLVPQV VTD</p>	
264	3860	G Protein- Coupled Receptor SLC/MCH1	NM_005297	<p>atgttgtgtc cttccaagac agatgggtca gggcactctg gtaggattca ccaggaaaact A  catggagaag ggaagaaggga caagattagc aacagtgaag ggaggagaaa tgggtggaga  ggattccaga tgaacggtgg gtcgctggag gctgagcatg ccagcaggat gtcagttctc  agagcaaaagc ccatgtcaaa cagccaacgc ttgctctctc tgtccccagg atcacctctc  cgcacgggga gcatctccta catcaacatc atcatgcctt cgggtgttcgg caccatctgc  ctcctgggca tcatcgggaa ctccacggtc atcttcgagg tctgtaagaa gtccaagctg  cactggtgca acaacgtccc cgacatcttc atcatcaacc tctcggtagt agatctcctc  tttctcctgg gcatgcccct catgatccac cagctcatgg gcaatggggt gtggcacttt  ggggagacca tgtgacccct catcacggcc atggatgcca atagtcagtt caccagcacc  tacatcctga cggccatggc cattgaccgc tacctggcca ctgtccaccc catctcttcc  acgaagtccc ggaagccctc tgtggccacc ctggtgatct gcctcctgtg ggccctctcc  ttcatcagca tcacccctgt gtggctgtat gccagactca tccccttccc aggaggtgca  gtgggctgcg gcatacgctt gcccaccca gacactgacc tctactgggt caccctgtac  cagtttttcc tggccttgg cctgcctttt tgggtcata cagccgcata cgtgaggatc  ctgcagcgca tgacgtctc agtggccccc gcctcccagc gcagcatccc gctgcggaca  aagaggggtga ccgcacagc catcgccatc tgtctggtct tctttgtgtg ctgggcaccc  tactatgtgc tacagctgac ccagttgtcc atcagccgcc cgacctcac ctttgtctac  ttatacaatg cggccatcag cttgggctat gccacaagct gcctcaaccc ctttgtgtac  atcgtgtctc gtgagacgtt ccgcaaacgc ttggtcctgt cgggtgaagcc tgcagccag  gggcagcttc gcgctgtcag caacgctcag acggtgtgac aggagaggac agaaagcaaa</p>	Homo sapiens

[illegible]

269	3862	G Protein- Coupled Receptor GPR3	NP_005272.1	gacctaacct actattcaga gacaacagtg gacaggacct atgtgatgct ggccttagtg tgaggagtg cctgggacct ggggtgctg cctgtgctgg cctggaactg cctggatggc ctgaccacat gtggcggtgt ttatccactc tccaagaacc atctggtagt tctggccatt gccttcttca tgggtgtttgg catcatgctg cagctctacg cccaaatctg ccgcatcgtc tgccgccatg cccagcagat tgcccttcag cggcaccctg tgcctgcctc ccaactatgtg gccaccgca agggcatgac cacactggcc gtggtgctg gagcctttgc cgcctgtgg ttgcccttca ctgtctactg cctgtgggt gatgccact cccacctct ctacacctat cttaccttg cccctgccac ctacaaactc atgataaacc ctatcatcta cgccttcgc aaccaggatg tgcagaaagt gctgtgggt gctgtgctg cgtgttcctc ttccaagatc ccctccgat cccgctccc cagtgtgc tag MMWGAGSPLA WLSAGSNVN VSSVGPAEGP TGPAAPLSP KAWDVVLCIS GTLVSCENAL P VVAIIVGTPA FRAPMFLVG SLAVADLLAG LGLVHFHFAV FCIGSAEMSL VLVGVLAMAF TASIGSLLAI TVDRYLSLYN ALTYISETTV TRTYVMALV WGGALGLGLL PVLAWNCLDG LITCGVWYPL SKNHLVVLAI AFFMVFGIML QLYAQICRIV CRHAQQIALQ RHLLPASHYV ATRKGIATIA VVLGAFAACW LPFTVYCLLG DAHSPLYTY LTLIPATYNS MINPIIYAFR NQDVQKVLWA VCCCCSSSKI PFRSRSPSDV	Homo sapiens
270	3863	G Protein- Coupled Receptor GPR31	NM_005299	atgccattcc caaactgctc agccccagc actgtgtggt ccacagctgt ggggtgtctg A ctggggctg agtgtgggt ggggtgctg ggaacgcgg tggcgtgtg gaccttcctg ttccgggtca ggggtggaa gccgtacgt gctacactgc tcaacctggc cctggctgac ctgctgttgg ctgctgctt gcttttctg gcgccttct cctgagcct ccaggcttgg catctggcc gtgtgggtg ctgggcccct cgttccctg tggacctcag ccgcagcgtg gggatggcct tccgtggcgc cgtggcttgg gaccgtacc tccgtgtggt ccacctcgg cttaaggctc acctgctgc tccagggc gccctgggg tctcgggct cgtctggctc ctgatggctg cctcaccct gccgggctt ctcactctg agccgcacca gaactccacc aggtgccaca gtttctact cagggcagac ggtccttca gcatcatctg gcaggaagca ctctcctgcc ttcagtttgt cctccccctt ggcctcatcg tgtctgcaa tgcaggcatc atcagggctc tccagaaaag actccgggag cctgagaaac agccaaagt tcagcgggcc caggcactgg tcaccttgggt ggtgtgctg tttgctctg gctttctgct cgtcttcctg gccagagtcc tgatgcacat ctccagaaat ctggggagct gcagggccct ttgtgcagtg gtcctacact cggatgtcac gggcagcctc acctacctgc acagtgtcgt caacccccgtg gtatactgct tctccagccc cacttccagg agctcctatc ggagggtctt ccacacccctc cgaggcaag ggcaggcagc agagccccca gatttcaacc ccagagactc ctattcctga LLLAACLPFL AAFYLSLQAW HIGRVGCWAL RFLDLRSV GMAFLAAVAL DRYLRVHPR LKVNLLSPQA ALGVSLVWL LMVALTCPGL LISEAAQNST RCHSFYSRAD GSFSLIWEA LSCLQFVLPF GLIVFCNAGI IRAIQKRLRE PEKQPKLQRA QALVTILVVL FALCFLPCFL ARVLMHIFQN LGSCRALCAV AHTSDVTGSL TYLHSVNPV VYCFSSPTFR SSYRRVFHTL RGKQAAEPP DFNPRDSYS	Homo sapiens
271	3863	G Protein- Coupled Receptor GPR31	NP_005290.1	cgaggcaag ggcaggcagc agagccccca gatttcaacc ccagagactc ctattcctga MPFPNCAPS TVVATAVGVL LGLECGGLL GNAVALWTFI FRVRWKPYA VYLLNLALAD P LLLAACLPFL AAFYLSLQAW HIGRVGCWAL RFLDLRSV GMAFLAAVAL DRYLRVHPR LKVNLLSPQA ALGVSLVWL LMVALTCPGL LISEAAQNST RCHSFYSRAD GSFSLIWEA LSCLQFVLPF GLIVFCNAGI IRAIQKRLRE PEKQPKLQRA QALVTILVVL FALCFLPCFL ARVLMHIFQN LGSCRALCAV AHTSDVTGSL TYLHSVNPV VYCFSSPTFR SSYRRVFHTL RGKQAAEPP DFNPRDSYS	Homo sapiens
272	3864	G Protein- Coupled Receptor	NM_005282	ctggtagacct tacttatctc tgttgctttc tggggctcta ggaaatgcca gcactcccac A ccacattgcc tgaactttcc aacactccct agctgcgtg tgtctatct caacacttcc tcatgtattt cttgtgtctt ctagaacatt cccccgcat tattacttca atatggctac	Homo sapiens

GPR4

acatacttcc taattgccc ttgaaaccatc tctctctcac cattgccag cgatgcttc  
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ggatccacgg cccgggtcc tgaagctct tgggttcat cttctacacc aatatctaca  
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gaagaagggt tgggacaaga agaaagggt tttattcatt cattcaacag aggtttatgt  
agggcactgt gctgggtggg gctggggaca caacaatgac tgaggcagcc tggccttggc

273	3864	G Protein-Coupled Receptor GPR4	NP_005273.1	ttcacaggc tcaccatata caagtaata aaaaatatgt aatgtttgga attgct MGNHTWEGH VDSRVDHLFP PSLYIFVIG GLPTNCLALW AAYRQVQRN ELGVYLMNLS IADLLYICTL PLWVDYFLHH DNWIHGPSC KLFGFIFYTN IYISIAFLCC ISVDRYLAFA HPIRFARLR VKTAVAVSSV VWATELGANS APLFHDLEFR DRYNHTFCFE KFPMEGWVAW MNLRYVEVGF LFPWALMLLS YRGILRAVRG SVSTERQEKA KIKRLALSLL AIVLVCFAPY HVLLLRSAL YLGRPWDCGF EERVFSAYHS SLAFTSLNCV ADPILYCLVN EGARSDVAKA LHNLRLFLAS DKPQEMANAS LTLETPLTSK RNSTAKAMTG SWAATPPSQG DQVQLKMLPP AQ	Homo sapiens
274	3866	G Protein-Coupled Receptor GPR6	NM_005284	atgaacgcga gcgcgcctc gctcaacgac tccaggtggg tggtagtggc ggccgaagga gcggcgccg gcggcacagc agcaggggg gcggacacgg cggaatggg accccctgct gcggcgctc taggagccgg cggcgagct aatgggtctc tggagctgtc ctgcagctg tcggctggc caccgggact cctgctgcca gcgtgaatc cgtgggacgt gctcctgtgc gtgtcggga cagtgatgc tggagaaaac gcgtggtgg tggcgctcat cgcgtccact ccggcgctgc gcacgcccc gtctgtgctg gtaggcagcc tggccaccgc tgacctgtg gcggcgctg gcctcatctt gcactttgtg ttccagtact tgggtccctc ggagactgtg agtctgctca cgggtggctt cctcgtggc tccctggcgg cctctgtcag cagcctgctg gccattacgg tggaccgcta cctgtccctg tataacgccc tcacctatta ctgcgcgg accctgttg gcgtgcacct cctgcttgc gccacttga ccgtgtccct aggcctggg ctgctgccc tgcgtggctg gaactgcctg gcagagcgg ccgctgtcag cgtggtggc ccgtggcgc gaagcaact ggctctgtc tccgcgctt tcttcattgt cttcgccatc atgctgcacc tgtacgtgct catctgccc gtagtctgg gccacgcga ccagatcgcg ctgcagcgc actgcctggc gccaccccat ctgcctgcca ccagaaagg tgtgggtaca ctggctgtg tgcgtggcac ttgcggccc agctggctgc ccttcgccc ctattgctg gtgggcagcc atgaggaccc ggcggtctac acttaacgca cctgctgccc cgcacactac aactccatga tcaatcccat catctatgcc ttccgcaacc aggatgccca gcgcgcctg tggctcctgc tctgtggctg ttccagctc aaagtgcctt ttcgttccag gtctccacg gaggtctga	Homo sapiens
275	3866	G Protein-Coupled Receptor GPR6	NP_005275.1	MNASASLND SQVVVAAEG AAAATAAGG PDTGEWPPA AAALGAGGGA NGSLELSSQL SAGPPGLLLP AVNPWDVLLC VSGTVIAGEN ALVVALIAT PALRTPMFVL VGSLATADLL AGCGLILHFV FQYLVFSETV SLLTVGFLVA SFAASVSSL ATVDRLSL YNALTYYRRR TLIGVHLLLA ATWTVSLGLG LLPVLGNCL AERAAACSVR PLARSHVALL SAAFFMVEGI MLHLYVRICQ VVWRHAHQIA LQOHCLAPPH LAATRKGVGT LAWLGTFGA SWLPFAIYCV VGSHPDPAV TYATLLPATY NSMINPIYA FRNQEIQRAL WLLLCGCFQS KVPFRSRSPS EV	Homo sapiens
276	3867	G Protein-Coupled Receptor GPR7	NM_005285	atggacaacg cctcgtctc ggagccctg cccgccaacg catcgggccc ggaccggcg ctgagctgct ccaacgcgc gactctggc gcgtgcccgc cgcgctggc ggtggctgta ccagttgtct acgcggtgat ctgcgcgctg ggtctggcgg gcaactccgc cgtgctgtac gtgtgtctgc gggcgcccc catgaagacc gtcaccaacc tgttcatcct caacctggcc atcgccgacg agctcttcac gctggtgctg cccatcaaca tcgcccactt cctgctgccc cagtgccct tcggggagct catgtgcaag ctcatcgtg ctatgacca gtacaacacc	Homo sapiens

[illegible]

280	3869	G Protein- Coupled Receptor HM74	NM_006018	cgccactttg ctggagcatt cactaggcga ggcgtcccat cggactcaact agccgcactc A atgaatcgc accatctgca ggcactcttt ctgaaataag acaagaagaa ctgctgtgtg sapiens ttccgagatg acttcattgc caaggtgttg ccgcgggtgt tgggctgga gtttatcttt gggttcttg gcaatggcct tgccctgttg attttctgtt tccacctcaa gtccctgaaa tccagccgga ttttctgtt caacctggca gtactgact ttctactgat catctgcctg ccgtctgga tggactacta tgtcggcgt tccagatgga actttgggga cctcccttgc cggctggtag tcttcattgt ttccatgaac cgcacgggca gcatcatctt cctcacgttg gtggcggtag acaggtattt ccgggtgttc catccccacc agccctgaa caagatctcc aattggacag cagccatcat ctcttgctt ctgtgggca tcaactgttg cctaacagtc cacctcctga agaagaagt gctgatccag aatggcctg caaatgtgtg catcagcttc agcatctgcc atacttccg gtggcacgaa gctatgttc tcttgagtt cctcctgccc ctgggcatca tctgttctg ctacagccaga attatctgga gcctgcggca gagacaaatg gaccggcatg ccaagatcaa gagagccatc acctcatca tgggtgtggc catcgtcttt gtcatctgct tcttccccag cgtggtgtg cggatccgca tcttctggct cctgcacact tcgggcacgc agaattgtga agtgtaccgc tcggtggacc tggcgttctt tatcactctc agcttcacct acatgaacag catgctggac ccgtgtgtg actacttctc cagcccatcc ttcccaact tcttctccac ttgatcaac cgtgcctcc agaggaagat gacaggtgag ccagataata accgcagcac ggcgtcgcg ctacagggg ctcccaacaa accagagggc gtccagaggg cgttaatggc caactccggt ggcctatgga gccctcttta tctgggccc acctcaata accttccaa gaaggacat tgcaccacag acccagcata tctggagaaa cagttgggct gttgcacga gtaatgtcac tggactcggc ctaaggtttc ctggaaacttc cagattcaga gaactgatt tagggaaact gtggcagatg agtgggagac tgggtgcaag gttgaccac aggaatcctg gaggaacaga gactaaagct tctaggcatc tgaacttgc tcatctctg acgtcgcag gactgaagat gggcaaatg taggcgtttc tgcagagcag agttggagcc agagatctac ttgtgacttg ttggccttct tcccacatct gcctcagact gggggggct cagctcctcg ggtgatctct agcctgcttg tgagctctag cagggataag gagagctgag attggaggga attgtgttc tccctggaga agccaggca tcattaacaa agccagtagg tcacctgct tccgtggacc aattcatct tcagacaagc tttagagaaa tggactcagg gaagagactc acatgctttg gtagtatct gtgttcccg tgggtgtaat aggggattag cccagaaagg gactgagcta aacagtgtta ttatgggaaa ggaatggca ttgctgcttt caaccagca ttaatgcaat ccattcctct cttgtttata gtaactaaag ggttagcag ttaaaacggc ttcaggatag aaagctgtt cccacctgtt tcgttttacc attaaaagg aaacgtgcct ctgccccacg gtagagggg gtgcacgttc ctctgggtc ctcgtctgt gttctgtac ttacaaaaa tctaccact caataaattt tgataggaga caaaaaaaa a	281	3869	G Protein- Coupled Receptor HM74	NP_006009.1	MNRHLLQDHF LEIDKKNCCV FRDDFIKVL PPVIGLEFIF GLLGNGLALW IFCFHLKSWK P SSRIEFLNLA VADFLLIICL PFVMDYVRR SDWNFGDIPC RLVLFMFAMN RQGSIIFLT V VAVDRYFRVW HPHALNKIS NWTAAIISCL LWGITVGLTV HLLKKLLIQ NGPANVCISF SICHTFRWHE AMFLEFLLP LGIILFCSAR IISWLRQROM DRHAKIKRAI TFIMVAIVF VICFLPSVW RIRIFWLLHT SGTQNCVYR SVDLAFFITL SFTYMNMLD PVVYFSSPS FPNFFSTLIN RCLQKMTGE PDNNRSTSV E LTGDPNKTRG APEALMANS G EPWSPSYLGP	Homo sapiens
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282	3870	G Protein- Coupled Receptor OGR1	NM_003485	TSNNHKKGH CHQEPASLEK QLGCCIE	atggggaaca tcaatgcaga caactcctcg atgagctgta ccacgaccca taccatccac A	Homo sapiens
					cagacgctgg ccccggtgggt ctatgttacc gtgtggtggg tgggcttccc ggcacactgc	
					ctgtccctct acttcggcta cctgcagatc aagccccgga acgagctggg cgtgtacctg	
					tgcaacctga cgggtggcga cctcttctac atctgtcgc tgccttctg gctgcagttac	
					gtgctgcagc acgacaactg gtctcacggc gacctgtcct gccaggtgtg cggcactcctc	
					ctgtacgaga acatctacat cagcgtgggc tctctgtctt gacctcctg ggaccgctac	
					ctggctgtgg cccatccctt ccgcttccac cagtccgga cctgaaggc ggccgtcggc	
					gtcagcgtgg tcaatctggc caaggagctg ctgaccagca tctacttctt gatgcacgag	
					gaggtcatcg aggacagaaa ccagcacgcg gtgtgctttg agcactacc catccaggca	
					tggcagcgcg ccatcaacta ctaccgcttc ctgtgggctt tctcttccc catctgctg	
					ctgctggcgt cctaccaggg catctgcgc gccgtgcgc ggagccacgg caccagagaag	
					agcgcgaag accagatcca gcggtggtg ctacgacccg tggatcatctt cctggcctgc	
					ttctgacctt accagtggtt gctgctgggt cgcagcgtctt gggaggccag ctgcgacttc	
					gccaaggcg ttttcaacgc ctaccacttc tccctcctgc tcaccagctt caactgcgtc	
					gccgaccccg tgctctactg ctctgtcagc gagaccaccc accgggacct ggcgcgcctc	
					cgcggggcct gccctggcctt cctcacctgc tccaggaccg gccgggccag ggaggcctac	
					ccgctgggtg ccccgaggc ctccgggaaa agcggggccc aggttgagga gcccgagctg	
					ttgaccgaag tccacccggc ctccagacc cctaaactgc cagggtcggg cgggttcccc	
					acgggcaggt tggcctag	
283	3870	G Protein- Coupled Receptor OGR1	NP_003476.1	MGNITADNSS MSCITDTHI QTLAPVAVVT VLVGFPANC LSLYFGYLQI KARNELGVYL P	CNLTVADLFY ICSLPFWLQY VLQHDNWSHG DLSCQVCGL LYENIYISVG FLCCISVDRY	Homo sapiens
				LAVAHPRFHF QFRLKAAVG VSWIWAKE LLSIYFLMHE EVIEDENQHR VCFEHPYIQIA	WQRAINYYRF LVGLFPICL LLASYQILR AVRRSHGTQK SRKDQIQRLV LSTVVFILAC	
				FLPYHVLVLLV RSVWEASCDF AKGVFNAYHF SLLTSTFNCV ADPVLVCFVS ETTHRDLARL	RGACLAFLTC SRTGRAREAY PLGAPEASGK SGAQGEPEL LTKLHPAFQT PNSPGSGGFP	
				TGRLA		
284	3921	Prostacyclin Receptor	NM_000960	agcaagtga ggcacagacg cagggacag gagagcctgg gcaagactgg agagcccaga A	cctgggatgg cggattcgtg caggaacctc acctacgtgc ggggctcggg ggggcccggcc	Homo sapiens
				accagcacc tgatgttcgt ggcgggtggtg gtgggcaacg ggctggccct ggccatcctg	agcgcacggc gaccggcgcg cccctcggcc ttcgcggtgc tggtaaccgg actggcggcc	
				accgacctgc tgggcaaccag ctctctgagc cggcgctgtg tcgtggccta tgcgcgcaac	agctccctgc tgggctcggc ccgaggcggc cccgcctctg gcgatgcctt cgccttcgcc	
				atgaccttct tgggctggc gtccatgctc atctctttg ccatggcctt ggagcgctgc	ctggcgctga gccacccta cctctacgcg cagctggagc ggccccgctg cgcgcgcctg	
				gcgctgccag ccatctacgc ctctgcgtc ctctctgcg cgtggccctt gctgggcttg	ggccaaacac agcagtactg ccccggcagc tgggtcttc tccgcatgcg ctgggcccag	
				ccggcgcgcg ccgcctctc gctggcctac gccggcctgg tggccctgct ggtggctgcc	atcttctctt gcaacggctc ggtcacctc agcctctgcc gcatgtaccg ccagcagaag	
				cgccaccagg gctctctggg tccacggcgg cgcacgggag aggacaggtt ggaccacctg		



285	3921	Prostaglandin Receptor	NP_000951.1	ct	atcctgtggt cccatcatgac agtgggtcatg gccgtgtgct cctgtgcctct cactgaccc aggtgtgctg cctgacagc agcagtgaaga tgggggacct ccttgcccttc cgtttctacg ccttcaaccc cactcctggac cctgtgggtct tcatcctttt cgcgaaggct gtcttccagc gactcaagct ctgggtctgc tgcctgtgctc tgggacctgc ccacggagac tgcgagacac ccttttccca gctgcctcc cggaggaggg acccaagggc cccctctgct cctgtgggaa aggaggggag ctgctgctt ttgtcggctt gggcgaggg gcaggtggag ccttgctc ccacacagca gtccagcgc agcgcctgg gaaactgctc caaagcagaa gccagcgtc cctgctccct ctgctgacat ttcaagctga cctgtgac tctgacctgt cctcgggcga caggagccag aaaatcagg acatggctga tggctgcga tcttggaaacc ttggccccc aactctggg ccatcagct gctgtttctc ctgcggcagg gcagtcgctg ctggctctgg gaagagagtg agggacagag gaaactgtta tcttgagtg cagaagaat ggttctctca aaataaccag tggcctggc gactgtctt ggcctggat tccccatcca tctcattgtc taaatattta gaagcggag aggttccag aggttctgt acagtcaggt ctgctctggt ctgggtgctg gctccaatct gcttccactt aggagccca actgcccacc ccaagtcccc aggggatggc cctccccctc taccagcca ctccaagagc cagccccctt tctgctccac aaaaaccaca gttattggaa agctccctg ccttccctg cgcgtggtcc ccaccaggc ttgggagccc tggcatccca aggggcaac gggaggaag ggaggtgct gcattgtgg tgatgacgta ggacatgtc ttggtacaaa aaggcctga gacattccac	Homo sapiens
286	3923	Prostaglandin n D2 Receptor	U31099	A	ct tadscrnltv vrgsvgpats timfvagvng nglalgilsa rrparsafa vlvtglaatd p llgtsflspa vfvayarnss llglarggpa lcdafafamt ffglasmlil famaavercia lshpylyaq l dgrpcarlal paiyafcvtl calplilglq hqoycpgswc flmrwaqpg gaafslayag lvalilvaaf lcnsgvtls l crmyrqokrh qsglgrprt gevedhlil lalmtvvmav cspltircf tqavapdss emgdllarf yafnpildpw vfifrkavf qrlklwvcl clgpaqhdso tplsolasgr rdprapsav kgegs cvpls awgegovepl pptoqssgsa vgtsskaeas vacslc gctgtgcaac ctggcgcca tgcgcaacct ctatggatg caccggcggc tgcagcggca a ccgcgctcc tgcaccagg actgtgccga gccgcgcgcg gacgggaggg aagcgtccc tcagccccg gaggagctgg atcacctct gctgctggcg ctgatgaccg tgccttcac tatgtgttct ctgccgtaa ttatcgcgc ttactatgga gatttaagg atgtcaagg gaaaaacagg acctctgaag aagcagaaga cctccgagcc ttgcgatttc tatctgtgat ttcaattgtg gaccttgga tttttatcat tttcagatc ccagtatctt ggatatattt tcacaagatt ttcattagac ctcttagta caggagccgg tgcagcaatt ccactaacat ggaatccagt ctgtgacagt gtttttcaat ctgtggtaag ctgaggaata tgtcacatt tcagtcaag aacca mkspfyrcqn ttsvekgsa vmgvlfstg llgnllalgl larsglwcs rrplrlpsv p fynlvcltv tdlgkclls pvviaayaqn rslrvlapal dnslcqafaf fmsffglstt lqlamalec wlsghppfy rrhitlriga lvapvvsafs lafcalfpmg fgkfvqycpg twcfiqmvhe egslsvlgs vlysslmall vlatvclnlg amrnlyamhr rlqrhprst rdcaepradg reaspoplee ldhllllalm tvlftmcslp vtyrayyaf kvkknrt eeaedlrar flsvtsivdp wififrspv friffhkief rplrysrscs nstnmessl	Homo sapiens
287	3923	Prostaglandin n D2 Receptor	Q13258	P		Homo sapiens

288	3924	Prostaglandin E Receptor EP1	NM_000955	<p> ggggcgagca gggctgagcg gccgtgatg gggacccac atccaggca gtgccggcac  ccctggcgcc tgacatgag ccttgccgc cctcaacct gagcctggcg ggcgagcgga  ccacatgcg ggcgcctgg gtcccaaca cgtcgccgt gccgcgtcg ggcgcttcgc  ccgcgtgccc catcttccc atgacgtgg cgcctggac gccgcgctc gccaccacc ttcctgctgt  tgctggcgca ggcgcgggc cctgtggcc accgacctg cgggccagt gacccggcg gcctgggtgc  tgctggccag cctgtggcc cactggggg cgcctcccg cggcggggc ctgccattc ctggcgggct  tgctgtgtgta cctggcctg tgcccgctg tgccgggctg tggcatggc gtggagcgt  gcatgttctt cttcgccctg cagcgcccg cgtctccag cgcgcgggt ctcggtgccc cgcgcggccc  gcgtggcgt cagcgcccg cgcgtggcc ggcgtggcc tggcctggc ctcggtgccc cgcgcggccc  tgccgtggc cgcgtggcc tgagctgag taccgggca cgtggtgct catcgcccg ggtcccccgg  tgcccgcta caggcactg cttgctggc cttgctggc ctcggtgccc ctcggtgccc gtcggtccc  tgcccgctt ggtgtgcaac acgtcagcg gccgtggcc gcatcgccc cgtggcgac  gcgctccc cggccctccc cgcctcag ccccgacag cggcgctgc tggggggcg  acggacccc ctcggcctcc gccctgccc cctgctccat cgttcggcc tccacctct  ttggcgctc tggagcagc ggcctggcac gcagagctcg cgcacagac gtggagatg  tgggccagt tgcgtgata atggtggtg cgtgcatctg ctggagccc atgtctggt  tggtggcgt gccgtggc ggcgtggc ctactccc gacgcgccc ctgtctctg  cgtgcccct tgcctctgg aaccagatc tggaccttg ggtgtacat ctactgccc  agccgtgct gcgcaactg cttcgccct cgtcccgag ggcggagcc aaggggcg  ccgggggct gggcctaaca cagagcgc ctcggtggc gggagggc ctcgctgccc agtcccccg  acagcgcc cagccactt taagcaca cagagggccc acgactaag cagccccc  tggtctggc caggtgccc ggcgagc ctttgggaa aaaaagccat tctg  </p>	Homo sapiens
289	3924	Prostaglandin E Receptor EP1	NP_000946.1	<p> MSPCGPLNLS LAGEATTCAA PWPNTSAPV PSGASPALPI FSMTPGAVSN LIALALLAQ P  AGRLRRRRA TTFLLFVASL LATDLAGHVI PGALVRLYT AGRAPAGGAC HFLGGCMVFF  GLCPILLGCG MAVERCVGVT RPLLHAARVS VARARLALAA VAAVALAVAL LPLARVGRYE  LQYPGTWCFI GLGPPGGWRQ ALLAGLFASL GLVALLAALV CNTLSGLALH RARWRRRSRR  PPASGPDSSR RRMGAHGPRS ASASSASSIA SASTFFGSR SSGSARRARA HDVEMVQGLV  GIMVSCICW SPMLVLVALA VGGWSSTSLQ RPLFLAVRLA SWNQILDWV YILLRQAVLR  QLRLLLPPRA GAKGGPAGLG LTPSAWEASS LRSSRHSGLS HF  </p>	Homo sapiens
290	3925	Prostaglandin E Receptor EP2	NM_000956	<p> gggcccgcgt cgcgcgctg ggtgcggga gggggtctg gatttcggtc cctccccctt A  ttcctctgag tctcggaac ctcagctct cagacctct tctcccagg taaaggcccg  gagaggagg cgcctctctt ttccaggcac cccacctgg gcaatgcctc caatgactcc  cagctgag actgcgagc gcgacagtg cttccccag gcgaaagccc agccatcagc  tccgtcatgt tctcgcccg ggtgctggg aacctcatg cactggcgct gctggcgcg  cgtggcggg gggacgtggg gtgcagcgc ggcgcagga gctccctctc cttgttccac  gtgctggtga ccgagctggt gttaccgac ctcgctggga cctgcctcat cagcccgatg  gtactggctt cgtacgcgc gaaccagac ctcggtggc tggcgcccc gagccgcgcg  tgccactact tgccttctg catgacctt ttcagccctg ccaatgctc catgctctc  gccatggccc tggagcgcta cctctgac ctcggtgac gggacccct acttaccac gcgcgcgctc  tcggcctccg gggcgctggc cgtgctgct gtcactatg cagttccct gctctctg </p>	Homo sapiens

291	Prostaglandin E Receptor EP2	NP_000947.1	3925	<p>tgcgtgcgc tgctggacta tgggcagtac gtcagtagt gccccgggac ctggtgcttc</p> <p>atccggcacg ggcggaccgc ttacctgcag ctgtacgcca cctgtctgt gcttctcatt</p> <p>gtctcgtgc tgcctgcaa cttcagtgct attctcaacc tcatccgcat gcaccgccga</p> <p>agccggagaa gccgctgcgg acctccctg ggcagtggcc gggcgggccc cggggccgcg</p> <p>aggagagggg aaaggggtgc catggcggag gagcgggacc acctcattct cctggctatc</p> <p>atgaccatca ccttcgcgt ctgctcctg ccttcacga ttttgcata tatgaatgaa</p> <p>acctctccc gaaaggaaaa atgggacctc caagctctta ggtttttatc aattaattca</p> <p>ataattgacc cttgggtctt tgccatcctt aggcctcctg ttctgagact aatgcgttca</p> <p>gtcctctgtt gtcggatttc attaagaaca caagatgcaa cacaaacttc ctgttctaca</p> <p>cagtcagatg ccagtaaaaca ggctgacctt tgaggtcagt agtttaaaag ttcttagtta</p> <p>tatagcatct ggaagatcat ttgaaattg ttccctggag aaatgaaac agtgtgtaaa</p> <p>caaatgaag ctgccctaatt aaaaaggagt atacaacat ttaagctgtg gtcaaggcta</p> <p>cagatgtgct gacaaggcac ttcatgtaaa gtgtcagaag gagctacaaa acctaccctc</p> <p>aatgagcatg gtacttgccc ttggaggaa caatcggtcg cattgaagat ccagctgcct</p> <p>attgatttaa gctttcctgt tgaatgacaa agtatgtggt ttgttaattt gtttgaaacc</p> <p>ccaaacagtg actgtacttt ctattttaat ctgtctacta ccgttatata catatagtgt</p> <p>acagccagac cagattaaac ttcatatgta atctctagga agtcaaatatg tggaagcaac</p> <p>caagcctgct gtcttgtgat cacttagcga acctttatt tgaacaatga agttgaaaat</p> <p>cataggcacc ttttactgtg atgtttgtgt atgtggaggt acctctatca ctacagtatt</p> <p>actcttacaa gagtggactc agtgggttaa catcagtttt gtttactcat cctccaggaa</p> <p>ctgcaggtea agttgtcagg ttattttatt tataatgtcc atagtctaag agtgatcaag</p> <p>aagacttttag gaatggttct ctcaacaaga aataatagaa atgtctcaag gcagtttaatt</p> <p>ctcattaata ctcttattat cctatttctg ggggagtagt tacgtggcca tgtatgaagc</p> <p>caaatattag gcttaaaaaa tgaaaaatct ggttcattct tcagatatac tggaaccttt</p> <p>ttaaagttga tattggggcc atgagtaaaa tagattttat aagatgactg tgttgtacca</p> <p>aaattcatct gtctatatatt tatttagggg aacatggttt gactcatctt atatgggaaa</p> <p>ccatgtagca gtgagtcata tcttaataata tttctaaaag tttagcatgt aaatgtaaac</p> <p>tcagcatcaa aatatcttcag tgaatttgca ctgtttaatc atagttactg tgtaaaactca</p> <p>tctgaaatgt tacaaaaata aactataaaa ca</p>	Homo sapiens
292	Prostaglandin E2 Receptor EP3	I32662	3926	<p>MGNASNDSQS EDCETRWLP PGESPAISSV MFSAGVLGNL IALALLARRW RGDVGCsAGR P</p> <p>RSSLSLFHLV VTELVTDL L GTCLISPVVL ASYARNQTLV ALAPESRACT YFAFAMTFFS</p> <p>LATMLMLFAM ALERYLSIGH PYFYQRRVSA SGGLAVLPVI YAVSLFLCSL PLLDYGQYVQ</p> <p>YCPGTWCFIR HGRYAYLQLY ATLLILLIVS VLACNFSVIL NLIRMHRRSR RSRCGPSLGS</p> <p>GRGPGGARRR GERVSMAEET DHLILLAIMT ITFAVCSLPF TIFAYMNETS SRKEKWDLQA</p> <p>LRFLSINSII DPWVFILRP FVLRMLRSVL CCRISLRTQD ATQTSCSTQS DASKQADL</p> <p>atgagaaaaa gaagactcag agagcaagag gaattttggg gaaattaa</p>	Homo sapiens
293	Prostaglandin E2 Receptor EP3	NM_000957	3926	<p>accagaggtt tcccagagag gaaggcgtgg ctccctcccg ggccagttag ccctggcgcc A</p> <p>gccgcggccg cggctccagc agcgagtag ggcggcggtt gcgccccgca ccatgggggg</p> <p>cagcccagcc ccagcgcggg taaacgccga cctccgcgcg cgccccgcgc gcgtctgccc</p>	Homo sapiens

294	3926	Prostaglandin E2 Receptor EP3	NP_000948.1	ac	cggtcctctg cggctctctg gacgccatcc cctcctcaac tcgaagccaa catgaaggag acccgggct acgagggga tgcccccttc tgaccgcgc tcaaccact ctacacaggc atgtgggcgc ccgagcgttc ccgagggcgc cggggaacc tcacgcgcc tccagggtct ggcaggatt gcgacggtt gtcgctggcc ttcgcgtaca ccatgctgt cactggtttc gtgggcaacg cactggccat gctgctcgtg tcgcgcagct accggcgccg ggagagcaag cgcaagaagt ccttcctgct gtgcacggc tggtgggcgc tcaccgacct ggtcgggcag cttctacca ccccggtcgt catcgtcgtg tacctgtcca agcagcgttg ggagcacatc gaccgctcg ggcgctctg cacttttttc gggctgacca tgactgtttt cggcctcttc tcgttggtca tcgcacgcgc catggccgct gagcggcgcc tggccatcag ggcgcgcac tggtatgca gccacatgaa gacgctgccc acccgcgctg tgctgctcgg cgtgtggctg gccgtgctcg ccttcgacct gctgccggtg ctagccggg cagggggca acgggactag ctcttcgcat cccgggacgt ggtgcttcat cagcaccggg cgctctgccc ttggccttc ggcgctgaca aactgggca accttttctt cgctctgccc aagccctgg tgcctcgtg ccgggccaag gtcacctttt cctgcaacct ggcacacct ggcacacct ggcacacct ggcacacct gccacggcat ctagtccag tgccacgtgg ggcgcgtaca gcaccgagac ggcacacct cttatggga tcatgtcgt gctgtcgtc tgctgtctc cgctcctgat aatgatgtt aaatgatct tcaatcacac atcagttgag cactgcaaga cacacacgga gaagcagaaa gaatgcaact tcttctaat agctgttccc ctagccttcc tgaaccagat cttggatcct tggtttacc tgctgttaag aaagatcctt cttcgaagt tttgccagat gagaagaa agactcagag agcaagagat ggggcctgat ggaagtgtt tttgtcagc atggaggcag gtccccagga cttgtgtcag tttctcatgat agagaacct cagtggtcca gtaagctga tgacttgaag ataatctgc ttaacctgg gatgaagtat cgtgaaacta ttttgacagc agatgaggaa ttttgggaa attaaaacct gcctttctgc caggtacaca tcaactggaag ctccatgact cttctttgtt aaagaaaaa aaatcacag aaacacccac ctccaaact attctctttt actcttccc ccaagccac ccccaaatat aactgttat cagaagctgt tatgtcctgt ttccatacat gtttttgtac ttttactata tctacataca tcaattaaac ttatgtccta ttgttttgtg aatttatatt tgcgtataca ttatcatatg taaaatttgc atttttttat tgaaaattat gtttcttgag atttatccac attgaaacat ggagctctaa atcgttaatt ttaaccgcta tagagtattc cataattga ataaagcata attgtttgt	Homo sapiens
295	3927	Prostaglandin E4 Receptor EP4	NM_000958	A	cggtgtccaa aaatcgacag ccaatgagac cggcttttag aagccgaaga ttgtgcagtt acccgggct acgagggga tgcccccttc tgaccgcgc tcaaccact ctacacaggc atgtgggcgc ccgagcgttc ccgagggcgc cggggaacc tcacgcgcc tccagggtct ggcaggatt gcgacggtt gtcgctggcc ttcgcgtaca ccatgctgt cactggtttc gtgggcaacg cactggccat gctgctcgtg tcgcgcagct accggcgccg ggagagcaag cgcaagaagt ccttcctgct gtgcacggc tggtgggcgc tcaccgacct ggtcgggcag cttctacca ccccggtcgt catcgtcgtg tacctgtcca agcagcgttg ggagcacatc gaccgctcg ggcgctctg cacttttttc gggctgacca tgactgtttt cggcctcttc tcgttggtca tcgcacgcgc catggccgct gagcggcgcc tggccatcag ggcgcgcac tggtatgca gccacatgaa gacgctgccc acccgcgctg tgctgctcgg cgtgtggctg gccgtgctcg ccttcgacct gctgccggtg ctagccggg cagggggca acgggactag ctcttcgcat cccgggacgt ggtgcttcat cagcaccggg cgctctgccc ttggccttc ggcgctgaca aactgggca accttttctt cgctctgccc aagccctgg tgcctcgtg ccgggccaag gtcacctttt cctgcaacct ggcacacct ggcacacct ggcacacct ggcacacct gccacggcat ctagtccag tgccacgtgg ggcgcgtaca gcaccgagac ggcacacct cttatggga tcatgtcgt gctgtcgtc tgctgtctc cgctcctgat aatgatgtt aaatgatct tcaatcacac atcagttgag cactgcaaga cacacacgga gaagcagaaa gaatgcaact tcttctaat agctgttccc ctagccttcc tgaaccagat cttggatcct tggtttacc tgctgttaag aaagatcctt cttcgaagt tttgccagat gagaagaa agactcagag agcaagagat ggggcctgat ggaagtgtt tttgtcagc atggaggcag gtccccagga cttgtgtcag tttctcatgat agagaacct cagtggtcca gtaagctga tgacttgaag ataatctgc ttaacctgg gatgaagtat cgtgaaacta ttttgacagc agatgaggaa ttttgggaa attaaaacct gcctttctgc caggtacaca tcaactggaag ctccatgact cttctttgtt aaagaaaaa aaatcacag aaacacccac ctccaaact attctctttt actcttccc ccaagccac ccccaaatat aactgttat cagaagctgt tatgtcctgt ttccatacat gtttttgtac ttttactata tctacataca tcaattaaac ttatgtccta ttgttttgtg aatttatatt tgcgtataca ttatcatatg taaaatttgc atttttttat tgaaaattat gtttcttgag atttatccac attgaaacat ggagctctaa atcgttaatt ttaaccgcta tagagtattc cataattga ataaagcata attgtttgt	Homo sapiens

296	3927	Prostaglandin E Receptor EP4	NP_000949.1	<p> tccagactga gcaggacaag gtgaaagcag gttgaggcgg ggtccaggac atctgagggc  tgacctggg ggtcgtgag gctgccaccg ctgctgcccg tacagacca gcttgcaact  ccaaggctgc gcaccgccag ccactatcat gtccactccc ggggtcaatt cgtccgccc  cttgagcccc gaccggctga acagcccagt acatcgtggt gctgtgcaag tcgcgcaagg agcagaagga  ggtggtggc aacctggtgg tacagctgg ccactgtggt ggtgtgccc gacctgtgg gcaatttgtt  gacgaccttc tacagctgg gtgacctgg ccactgtggt ggtgtgccc gacctgtgg gcaatttgtt  ggtgagcccg gtgacctgg ccactgtggt ggtgtgccc gacctgtgg gcaatttgtt  gtcgagtagt agcacttca tctgtctctt ccactgtggt ggtgtgccc gacctgtgg gcaatttgtt  cgccatgagt gtcgagcgtt acctggccat caacatgctt tgcagtctat gcgtccaacg tgcctttttg  ggacaagcga ttggcgggccc tcacgctctt tcggtagctc gcggtgctgag taccagaca cctggtgctt  cgcgctgccc aacatggggtc tcggtagctc tgacggcgca cgcgctctac tctacatgt acgcggtt  catgactgg accaccaacg tgacggcgca cgcgctctac tctacatgt acgcggtt  cagctccttc ctcatctctg ccactgtctt ctgcaacgtg ctgtgtgctg gcgctgtgct  ccgcatgcac cgcagttca tgcgcgcac ctgctgggccc accagcagc accacgcggc  cgcgccgccc tcggttgctt ccgcgggcca cccgctgccc tccccagctt tgcgcgctt  cagcgacttt cggcgccgccc ggagcttccc cgcgctgccc ggcgcgcaga tccagatggt  catcttactc attgccacct cctggtggtt gctcatctgc tccatcccgc tctggtgctg  agtattcgtc aaccagttat atcagccaag ttggagcga gaagtcagta aaatccaga  tttgcaggcc atccgaattg ctctgtgtaa cccactcta gacccctgga tatatactt  cctgagaaaag acagtgtca gtaagcaat agagaagatc aaatgctctt tctgcccgc  tgccatgtca ggcactctc cgcaggagc gctcgggaca gcaactgctc gacagtcaaa ggacatcttc  tgccatgtca ggcactctc cgcactctc cgcactctc cgcactctc cgcactctc  atctcagacc ctctgcccag acctctcact gccagacctc agtgaagatg gccttgagg  caggaatttg ctccaggtg tgcctggcat ggcctggcc caggaagaca ccactcact  gaggactttg cgaatatacag agactcaga ctcttcacag ggtcaggact cagagagtgt  cttactggtg gatgagctg gtggagcgg caggcgtggg cctgccccta aggggagctc  cctgcaagtc acatttccc acatttccc acatttccc acatttccc acatttccc  aaggaaaagaa atacagtact gtttctggac ccttataaaa tctgtgcaa tagacacata  catgtcacat ttagctgtgc tcagaagggc tatcatca  catgtcacat ttagctgtgc tcagaagggc tatcatca  LAVTDLLGTL LVSPVTIATY MKGQWPGGQP LCEYSTFILL FFSLSGLSII CAMSVERYLA  INHAYFYSHY VDKRLAGLTL FAVYASNVLF CALPNMGLGS SRLQYPTDTC FIDWTINVT  HAAYSIMYAG FSSFLILATV ICNVLVCGAL LRMHRQFMRR TSLGTEQHHA AAAASVASRG  HPAASPALPR LSDFRRRSF RRIAGAEIQM VILLIATSLV VLICSIPLW RVFVNQLYQP  SLEREVSKNP DLQAIRIASV NPILDPIYI LLRKTVLSKA IEKIKLFCR IGGRRERSG  QHCSDSQRTS SAMSGHSRSF ISRELKEISS TSQTLPLDLS LPDISENLG GRNLLPGVPG  MGLAQEDTTS LRTLRISETS DSSGQDSES VLLVDEAGGS GRAGPAPKGS SLQVTFPSET  INLSEKCI </p>	Homo sapiens
297	3928	Prostaglandin F2-alpha Receptor	NM_000959	<p> ggcgcggggc gccatggcac accgagcggc tccgtcttct gctcctcaga gagcccggtt A  ggcgcgctgg gatgacaaga tgtctggact gcaatcctgc acagtttga gagggagatg  acttgagtgg ttggctttta tctccacaac aatgtccatg acaattcca acagctagt </p>	Homo sapiens

gtctcctgca gctgcgcttc ttccaacac aactgccag acggaacc ggccttcggt  
atctttttca gtaatttca tgacagtggg aatcttgtca aacagccttg ccatcgccat  
tctcatgaag gcataatcaga gatttagaca gaagtccaag gcatcgtttc tgcctttggc  
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taattgagac tttttcttgg cttgtttgtg taattcaacc aaagaattt caataccat  
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ctttccctgt taggtgtatt tcagattctc taggaaatct ggtgaagtaa ccagaagact

Accession	Gene	Protein	Species	Sequence
298	Prostaglandin F2-alpha Receptor	NP_000950.1	Homo sapiens	<p>ttcagatggt ttatttgctt tcagcagaga atttattcca tacagttact taagagtgtt</p> <p>gatgtcttgt gaacagagat ataaggaacc attctccatc cttccttacc atgctgggta</p> <p>caatgcttct atgaatatatt ccatgtattt tgactgggga gaggcatgga gaagaaatc</p> <p>tcattcagg gctccaggat ccttctcctt gaggcttcta aataaatggc agaattcttg</p> <p>ctgtattgcc atgatgtcac cctggcccatg tgtactgact tgaggagatc ttgcaacatg</p> <p>gccatgtgca aggcctttaag gactgagaga gatgtgtaca tatcttagga gggttatcta</p> <p>tggtatctga gtatatgttt gggtaaccaa attggtctta aaatgatgt taaccaaga</p> <p>agtagacatc aaaaattaaa aaaaaaaa aaaaa</p> <p>MSMNSKQLV SPAALLSNT TCQENRLSV FFSVFTMTVG ILSNLSIAIAI LMKAYQRFQ P</p> <p>KSKASFLLLA SGLVITDFEG HLINGAIAVF VYASNDKEWIR FDQSNVLCIS FGICMVFSGL</p> <p>CPLLLGSMVA IERICGVTKP IFHSTKITSK HVKMMLSGVC LFAVFIALLP ILGHRDYKIQ</p> <p>ASRTWCFYNT EDIKDWDREF YLILFSFLGL LALGVSLLCN AITGITLLRV KFKSQHRQ</p> <p>RSHHLEMIQ LLAIMCVSCI CWSPLVTMA NINGNHSLSL ETCETTLFAL RMAWNQILD</p> <p>PWYIILLRKA VLKLYKLAS QCCGVHVISL HIWEISSIKN SLKVAASIS PVAEKSAST</p>
299	Proteinase-Activated Receptor 2	NM_005242	Homo sapiens	<p>cggcccgccc tggggaggcg cgcagcagag gctcagattc ggggcagggt agaggtgac A</p> <p>ttctctcggg tgcgtccagt ggagctctga gtttgaatc ggtggcgcg gattccccgc</p> <p>gcgccggcg tcggggcttc caggaggatg cggagcccca gcgcggcgtg gctgctgggg</p> <p>gccgccatcc tgctagcagc ctctctctcc tgcagtgcca ccatccaagg aaccaataga</p> <p>tcctctaaag gaagaagcct tattggtaag gttgatggca catcccacgt cactggaaaa</p> <p>ggagttacag ttgaacacgt ctttctctgt gatgagtttt ctgcatctgt cctcactgga</p> <p>aaactgacca cggctcttct tccaattgtc tacacaattg tgttctgtgt gggtttgcca</p> <p>agtaacggca tggccctgtg ggtcttctt ttcgaacta agaagaagca cctctgtgtg</p> <p>attacatagg ccaatctggc ctggctctgc ctctctctg tcactctggt ccccttgaag</p> <p>attgacctac acatacatgc caacaactgg attttgggg aagctctttg taatgtgctt</p> <p>attggctttt tctatggcaa catgtactgt tccattctct tcatgacctg cctcagtggtg</p> <p>cagaggtatt gggctcatct gaaccccatg gggcactcca ggaagaaggc aaacattgcc</p> <p>attggcatct cctgggcaat atggctgctg attctgctgg tcaccatccc ttgtatgttc</p> <p>gtgaagcaga ccatcttcat tctgcccctg aacatcacga cctgtcatga tgttttgcc</p> <p>gagcagctct tgggtgggaga catgttcaat tacttctct ctctggccat tggggctctt</p> <p>ctgttccag cctctctac agcctctgac tatgtgtgta tgatcagaat gctgcgatct</p> <p>tctgccatgg atgaaaactc agagaagaaa aggaagaggg ccatcaaac cattgtcact</p> <p>gtcctggcca tgtacctgat ctgcttcat cctagtaacc ttctgcttgt ggtgcattat</p> <p>tttctgatta agagccaggg ccagagccat gtctatgccc tgtacattgt agcctctgc</p> <p>ctctctaccc ttaacagctg catcgacccc tttgtctatt actttgttcc acatgatttc</p> <p>agggatcatg caaagaacgc tctcctttgc cgaagtgtcc gcaactgtaaa gcagatgcaa</p> <p>gtatccctca cctcaagaa acactccagg aaatccagct cttactcttc aagttcaacc</p> <p>actgttaaga cctcctattg agttttccag gtccctcag ggaatttga cagtaggag</p> <p>tggaacctgt ttaatgttat gaggacgtgt ctgttatttc ctaatacaaaa aggtctcacc</p> <p>acataccacc g</p> <p>MRSPSAWLL GAAILLAASL SCSGTIOGTN RSSKGRSLIG KVDGTSHTVG KGVTVETVFS P</p> <p>VDEFSASVLT GKLTTFVLPV VYTVFVWGL PSNGMALWVF LFRTKKKHPA VIYMANLALA</p>
300	Proteinase-Activated Receptor	NP_005233.2	Homo sapiens	<p>ttcagatggt ttatttgctt tcagcagaga atttattcca tacagttact taagagtgtt</p> <p>gatgtcttgt gaacagagat ataaggaacc attctccatc cttccttacc atgctgggta</p> <p>caatgcttct atgaatatatt ccatgtattt tgactgggga gaggcatgga gaagaaatc</p> <p>tcattcagg gctccaggat ccttctcctt gaggcttcta aataaatggc agaattcttg</p> <p>ctgtattgcc atgatgtcac cctggcccatg tgtactgact tgaggagatc ttgcaacatg</p> <p>gccatgtgca aggcctttaag gactgagaga gatgtgtaca tatcttagga gggttatcta</p> <p>tggtatctga gtatatgttt gggtaaccaa attggtctta aaatgatgt taaccaaga</p> <p>agtagacatc aaaaattaaa aaaaaaaa aaaaa</p> <p>MSMNSKQLV SPAALLSNT TCQENRLSV FFSVFTMTVG ILSNLSIAIAI LMKAYQRFQ P</p> <p>KSKASFLLLA SGLVITDFEG HLINGAIAVF VYASNDKEWIR FDQSNVLCIS FGICMVFSGL</p> <p>CPLLLGSMVA IERICGVTKP IFHSTKITSK HVKMMLSGVC LFAVFIALLP ILGHRDYKIQ</p> <p>ASRTWCFYNT EDIKDWDREF YLILFSFLGL LALGVSLLCN AITGITLLRV KFKSQHRQ</p> <p>RSHHLEMIQ LLAIMCVSCI CWSPLVTMA NINGNHSLSL ETCETTLFAL RMAWNQILD</p> <p>PWYIILLRKA VLKLYKLAS QCCGVHVISL HIWEISSIKN SLKVAASIS PVAEKSAST</p>

## Receptor 2

301 4052 Proteinase- Activated Receptor 3 NM\_004101 Homo sapiens

DLLSVIFPPL KIAYHIHANN WIYGEALCNV LIGFFYGNMY CSILEMTCLS VQRYWTVVNP  
 MGHSRKKANI AIGISLAIWL LILLVTIPLY VKQTFIPPA INITTCHEVDL PEQLLVGDMF  
 NYFLSLAIGV FLFPAFLTAS AYVLMIRMLR SSAMDENSEK KRKRAIKLIV TVLAMYLICF  
 TPSNLLLVVH YFLIKSQGS HVYALYIVAL CLSLNSCID PFVYFVSHD FRDHAKNALL  
 CRSVRTVKQM QVSLTSKKHS RKSSSYSSSS TTVKTSY  
 cctgcctgca cggcacagga gagcaaacct ctacagacag accaaggctt ccattgtctg A  
 ctgacacatg gaactgaggt gaaattgtgc tcaatgattt tacagatttc ataactgtta  
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 gaaagtgtt cacatctcca tgtgaaaaat gctaccatgg ggtacctgac cagctcctta  
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 gatcatagat ggtgtgtgta tgttaaggcg agtctctca tcttctgtat tttaccatt  
 tgccttgcct caagcaatat tattcttatt attcaccatg ctaactacta ctacaacaa  
 actgatggct tataatttat atatctcata gctttgtgccc tgggtagtct taatagtgtg  
 ttagatccat tcttttatt tctcatgtca aaaccagaa atcactccac tgcctacctt  
 acaaaatagt gaaatgatct tagagaacaa ggacagccat cacagagaac gtctgttttc  
 aagaacaaca taagcatagt gcaaggagct ccatttccga gctcctaaga aatatgcttc  
 aaaggtcaaa cattacaaa gcattagtag tttgtttgtt tgtttttgag actgagtctc  
 actttatcac ccagactggc gtgcagtggc actatcttgg cctattgcaa cctctgctc  
 ccaggtcagc ctccaagta gctgggatta caccaccatg ccagctact aaaaatactt  
 gtatttttag tagagaggg gtttaccat gttgaccagg ctggtcttga actcctgacc  
 tcaagtgatc ttccggctc agcctccaa agtgcgtgat tacaggcgtg agccactgag  
 ccagccagca ttagtaattt ttaaaaacac ttatcagta ttttaaaaat gttaatgcag  
 gagaaaagat atcaaacctc tatggaataat gacatttcca tttgccttat tgctacttca  
 agctctttaa atcaccatct tccctatttc

302 4052 Proteinase- Activated Receptor 3 NP\_004092.1 Homo sapiens

GATITVKIKC PEESASHLV LLLLLPTFCQ SGMENTNNL AKPTLPKTF RGAPPNSFEE FPFSALEGWT P  
 FTRRSICTTV FYTNLAIADE LFCVTLPEFKI AYHLNGNNWV FGEVLCRATT VIFYGNMYCS  
 ILLACISIN RYLAIVHFFT YRGLPKHTYA LVTCGLVWAT VFYMLPFFFI LKQEYLVQF  
 DITTCHEVDHN TCSSSPFQL YYFISLAFFG FLIPFVLIY CYAAIIRTIN AYDHRWLWYV



303	4090	G Protein- Coupled Receptor GPR17	NM_005291	KASLLILVIF TICFAPSNI LIIHHANYYY NNTDGLYFIY LIALCLGSLN SCLDPFLYFL MSKTRNHSTA YLTK	ccgacaccca cgggaggaga tcacctgctg cccgcagac cctgtccct tctctccgga A ccagcagcta gagtagtcc aacggagtt ggtgggctgg atccagaaag ccccaagag agatgctgaa actctcaggc tctgactcca gccaaagcat gaatggcctt gaagtggctc ccccagttct gatcaccac ttctccctgg ccacggcaga gcaatgtggc caggagacgc cactggagaa catgctgttc gctctctct acctctctga tttatcctg gctttagttg gcaataacct ggctctgtgg cttttcatcc gagaccacaa gtccgggacc cgggccaacg tgttccctgat gcatctggcc gtggccgact tgtgtgctgt gctggctctg cccaccgccc tggtctacca cttctctggg aaccactggc catttgggga aatgcacgc cgtctcacgg gcttccctct ctacctaac atgtacgcca gcactactt cctcacctgc atcagcgccg accgtttcct ggccattgtg caccgggtca agtccctcaa gtcccgagg cccctctacg cacacctggc ctgtgccttc ctgtgggtgg tgggtggctgt ggccatggcc ccgctgctgg tgagcccaca gaccgtgcag accaaccaca cgggtgctgt cctgcagctg taccgggaga aggcctccca ccatgcccct gtgtccctgg cagtggcctt cacttcccg ttcatcaca cggtcacctg ctacctgctg atcatccgca gccctgggca gggcctcgct gtggagaagc gcctcaagac caaggcagtg cgcattgatc ccatagtgtt ggcctatctt ctggtctgct tcgtgcccta ccagtcacac cgtccgctct acgtgctgca ctaccgcagc catggggcct cctggcccac ccagcgcatc ctggcccctg caaacgcgat cactcctgc ctaccagcc tcaacggggc actcgacccc atcatgtatt tctctgtgct tgagaagtct cgccacgccc tgtgcaactt gctctgtggc aaagggtca agggcccgc cccagcttc gaagggaata ccaacgagag ctgctgagt gccaagttag agctgtgagc gggggggcgc gtccaggccg agcgagact gtttaggact cagcagacc agcaaggagc atctgcccct tccccagcca cctccccagc aagcaacctg aaatctcagc agatgccac cattctcta gatgcctag tctcaaccca taaaaggaa gaactgaca aggggatcca tcggccacc ctctgcaggg gcttgtagt gctacaatgg ctctagaca ctcaacgact tcatctgtgg caggagaga ggaggccgga agaacaacc ctgaacaatg gaggccttc ttcccgccta ggctcccagc ctccttcccg ctacagaatc gctcatcggc gaggtcagc agaaagaccc tgaaggcagg ctgcaaatga ccagaagag ggacctggga gtcctgtggg ggacggggag ggagtctcaa tactcctttg cagcgcaagg tactctgagt cccctctgta gtgcctctgc cagacacaca ctgcctgagt tgaagagaca caggccacac atttcaggct ggttgccagc ggacgtcagc actcacggcc tgcggggact cagcacagct ctggattctg gatctcctt gctgtaaccc cacgcacaag cctgcaacc ccagagctct ttgacaggct cccaggcctc ccagtccctg acaagcatgt gcagtcaagg gagctcagct caggccaggc ctgggctgtg cactgccc ccactgacc agaccactt cctccagaga ggcctctctc cgcctgagct atttccctg ctagtgtgca gatatttccc taacatgtcc tttttgtat ttgtttgtac ggaccataaa tataactgta gctttaagac taataaaaa	Homo sapiens
304	4090	G Protein- Coupled Receptor GPR17	NP_005282.1	MSKRNSWAGS RKPPREMLKL SGSDSSQSMN GLEVAPPGLI TNFSLATAEQ CGQETPLENM P LFASFYLLDF ILALVGNLTA LWFIRDHKS GTPANVFLMH LAVADLSCVL VLPTRLVYHF SGNHWPFGEL ACRLTGFEFY LNMVASYIFL TCISADRFLA IVHPVKSILK RRPLYAHLAC AFLWVVVAVA MAPLLVSPQT VQTNHTVWCL QLYREKASHH ALVSLAVAFV FPFITTVTCY	Homo sapiens	

305	4254	Rhodopsin	NM_000539	LSAKSEL	LLIIRSLRQG LRVKRLKTK AVRMIIVLA IFLVCFVPH VNRVVLHY RSHGASCATQ RILALANRIT SCILSINGAL DPIMYFFVAE KFRHALCNLL CGKRLKPPP SFEGKTNESS	Homo sapiens
					agagtcaccc agctggagcc ctgagtggct gagctcaggc cttcgcagca ttcttgggtg A	
					ggagcagcca cgggtcagcc acaaggcca cagccatgaa tggcacagaa ggcctaact	
					ttctacgtgcc ttctccaat gcgacgggtg tggtagcagc ccccttcgag taccacagct	
					actacctggc tgaagccatgg cagtttctcca tgcgtgcgc ctacatgttt ctgctgacg	
					tgctgggctt cccccaacc ttccctcacc tctacgtcac cgtccagcac aagaagctgc	
					gcacgcctct caactacac ctgctcaacc tagccgtggc tgacctcttc atggctcctag	
					gtggcttcac cagcacctc tacacctctc tgcattggata cttcgtcttc gggccacag	
					gatgcaattt ggaggcttc ttggccacc ttggcgttga aattgccctg tggctccttgg	
					tggctcctggc catcgagcgg tacgtgggtg tgtgtaagcc catgagcaac ttccgcttcg	
					gggagaacca tgccatcatg ggcgttgctt tcacctgggt catggcgctg gctgcgccg	
					cacccccact cgcggctgg tccaggta caacccaggg cctgcagtcg tctgtgtgaa	
					togactacta cagctcaag ccggaggtca acaacgagtc tttgtcatc tacatgttcg	
					tggctccact caccatccc atgattatca tcttttctg ctatgggcag ctgctcttca	
					ccgtcaagga ggcgctgcc cagcagcagg agtcagccac cacacagaa gacagagaag	
					aggtcacccg catggtcat atcatggtca tgcgttctt gatctgctgg gtgcccctacg	
					ccagcgtggc attctacatc ttaccccacc agggctccaa cttcggctcc atcttcatga	
					ccatcccagc gttctttgcc aagagcgccg ccatctacaa cctgtcatc tatatcatga	
					tgaacaagca gtccgggaac tgcatggtca ccacctctg ctgcggcaag aacctactgg	
					gtgacgatga ggcctctgct accgtgtcca agacggagac gagccagggtg gccccggcct	
					aagacctgcc taggactctg tggccgacta taggcgtctc ccatccccta cacttcccc	
					cagccacagc catcccacca ggagcagcgc ctgtgcagaa tgaacgaagt cacataggct	
					ccttaatttt tttttttttt ttaagaaata attaatgagg ctctcactc acctgggaca	
					gcctgagaag ggacatccc caagacctac tgatctggag tcccacttc cccaaggcca	
					gcgggatgtg tgcccctcct cctcccaact catctttcag gaacacgagg attcttgctt	
					tctggaaaag tgtcccagct tagggataag tgtctagcac agaattgggg acacagtagg	
					tgcttaataa atgctggatg gatgcaggaa ggaattggagg aatgaattggg aaggagagaac	
					atatctatcc tctcagacc tgcagcagc agcaactcat acttgggctaa tgatatggag	
					cagttgtttt tccctccctg ggcctcactt tcttctccta taaaatggaa atcccagatc	
					cctggctcctg ccgacacgca gctactgaga agacaaaag aggtgtgtgt gtgtctatgt	
					gtgtgtttca gcactttgta aatagcaaga agctgtacag attctagtta atgttgtgaa	
					taacatcaat taatgtaact agttaattac tatgattatc acctcctgat agtgaacatt	
					ttgagattgg gcattcagat gatgggggtt caccacaact tggggcagggt ttttaaaaa	
					tagctaggca tcaaggccag accaggcctg ggggttgggc tgtaggcagg gacagtcaca	
					ggaatgcagg atgcagtcat cagacctgaa aaacaacac tgggggaggg gacgggtgaa	
					ggccaagtcc ccaatgaggg tgagattggg cctggggctc caccctagt gtggggcccc	
					aggtcccctg cctcccctc ccaatgtggc ctatggagag acaggccttt ctctcagcct	
					ctggaagcca cctgctcttt tgcctagca cctgggtccc agcatctaga gcatggagcc	
					tctagaagcc atgctcacc gccacattt aattaacagc tgagtcctctg atgtcatcct	

306	4254	Rhodopsin	NP_000530.1	<p>tactcgaaga gcttagaagc aaagagtggg aaattccact gggcctacct tccttgggga</p> <p>tgttcatggg cccaggtttc cagtttccct tgccagacaa gcccatcttc agcagttgct</p> <p>agtcattctt ccattctgga gaattctgtc caaaaagctg gccacatctc tgaggtgtca</p> <p>gaattaagct gcttcagtaa ctgtctcccc ttctccatat aagcaagcc agaagctcta</p> <p>gctttaccga gctctgcctg gagactaagg caataaaggc tcagctccta</p> <p>tgttggtatt aacggtggtg ggttttgggt ctttcacact cttaccacag gatagattga</p> <p>aactgccagc ttccacctga tccctgacct tgggatggct ggattgagca atgagcagag</p> <p>ccaagcagca cagagtcctc tggggctaga ggtgaggag gcagtcctgg gaatgggaaa</p> <p>aacccca</p>	Homo sapiens
307	4284	Retinal G Protein-Coupled Receptor RPE	NM_002921	<p>agagacagct gggccactgg cagtgaggga gagtggat ggcagagacc agtgccctgc A</p> <p>ccactggctt cggggagctc gagtggtctg ctgtgggat ggtgctactg gtggaagctc</p> <p>ttctcggctt cagctcaat accctgacca tcttctctt ttgcaagacc ccgagctgc</p> <p>ggactcctcg ccactactg gtgctgagct tggctcttgc ggacagtggg atcagcctga</p> <p>atgccctcgt tgcagccaca tccagccttc tccggcgtg gccctacggc tcggacggct</p> <p>gccaggctca cggcttcag ggctttgtga cagcgttggc cagcatctgc agcagtgcag</p> <p>ccatcgcatg gggcggttat caccactact gcaccgtag ccagctggcc tggaactcag</p> <p>ccgtctctct ggtgctctc gtgtggctgt cttctgctt ctggggcagct ctgccccctc</p> <p>tggtttgggg tcactatgac tatgagccac tggggacatg ctgcaccctg gactactcca</p> <p>aggggacag aaactcacc agcttctct taccatgtc cttcttcaac ttcgccatgc</p> <p>ccctcttcat cagatcact tctacagtc tcatggagca gaaactgggg aagagtggcc</p> <p>atctccaggt aaacaccact ctgccagcaa ggacgtgct gctcggctgg ggcctctatg</p> <p>ccatcctgta tctatacgca gtcatcgag acgtgacttc catctcccc aaactgcaga</p> <p>tggtgcccgc cctcattgcc aaaaatggtg ccacgatcaa tgccatcaac tatgccctgg</p> <p>gcaatgagat ggtctgcagg ggaatctggc agtgcctct accgcagaag agggagaagg</p> <p>accgaaccaa gtgagcctgc caccctggag tgagccccag gccaggaggc tgttccagga</p> <p>gtcctgccc gcagcctcgg tggccaaagg cagacactca cccaccttc ccagtgggcc</p> <p>cgtggatcct ggtcctaggc tggacacagg attcagaaag acaccaggct gcacagaaag</p> <p>agccagatgg acctgagtgt cggtcacagc cccctacact caaggctgag aggcctcagg</p> <p>aaagtcatct ctttttaaaa ataataata atgtaagggg gtacagtga gttttgttac</p> <p>atggatagat tgcctagtgg tgaagtctgg gcttttagtg taaccatcac cctaataata</p> <p>tacgttgtag ccattaaagt atttctcat cctcaccccc tccaccttg tcaccttct</p> <p>gagtcctcaa tgtctattat tccacactcc atgtccact gtacacatta tttagtcccc</p> <p>acttacaagt gagaacatgt ggtattgac ttcca</p>	Homo sapiens
308	4284	Retinal G Protein-	NP_002912.1	<p>ADSGISINAL VAATSSILRR WFGSDGCGA HGFGGFTVAL ASICSSAATA WGRYHYCTR</p>	Homo sapiens

309	4321	Coupled Receptor RPE	NM_002980	<p>SQLAWN SAVS LVLFWLSSA FWAALPLL GW GHYDYEPLGT CCTLDYSKGD RNFTSFLFTM  SFENFAMPLF ITITSYSLME QKLGKSGHLQ VNTTLPARTL LLGWGPYAIL YLVAVIADVT  SISPKLQWVP ALIAKMWPTI NAINYALGNE MVRGIWQCL SPQKREKDR T K</p>	Homo sapiens
		Secretin Receptor		<p>acgaggccgg ccggagcccg ggaccctcg cggggcgctg agtccccg cgggcagagg A  gcacgggacg gcggacgtcg gggcgccctc ggggaacgtg cgggcaccat gcgtccccac  ctgtgcgcgc cggtgcagca gctactactg cgggtgctgc tcgctgcgc cgcgcactcg  actggagccc ttccccgact atgtgacgtg ctacaagtgc tgtgggaaga gcaagaccag  tgcctgcagg aactctccag agagcagaca ggagacctgg gcacggagca gccagtgcga  ggttgtagg ggatgtggga caacataaag tcttgccct ctctgtgcc gggcgcatg  gtggaggtg aatgcccag atctctccg atgtccacca gcagaaatgg ttcttgttc  cgaactgca cacaggatgg ctggtcagaa acctcccca ggcctaactc ggctgtggc  gttaaatgta acgactcttc caacagagaag cggcactcct acctgctgaa gctgaaagtc  atgtacaccg tgggctacag ctctccctg gtcagtctcc tggtcgcct tggcatcctc  tgtgctttcc ggaggtccca ctgcactgc aactacatcc acatgcacct gtctgtgtcc  ttcatccttc gtgcctgtc caacttcac aaggagccg tgctcttctc ctcatatgat  gtcacctact gcgacctgca caggcgggc tgcagctgg tcatgtgtct gtccagtagc  tgcatactgg ccaactactc ctggctgtg tgcgaaggcc tctaccttca cacactcctc  gccatctcct tcttctctga agaaaagtac ctccaggat ttgtggcatt cggatggggg  tctccagcca ttttgttgc tttgtgggt attgccagac actttctgga agatgttggg  tgctgggaca tcaatgccaa cgcattccatc tgggtgatca ttcgtgtgcc tgtgatcctc  tccatcctga ttaatttcac cctttcata aacattctaa gaatcctgat gagaaaactt  agaacccaag aaacaagagg aaatgaagtc agccattata agcgctggc caggctccact  ctctgtctga tccccctctt tggcatccac tacatcgtct tgccttctc cccagaggac  gctatggaga tccagctgtt ttttgaacta gcccttggct cattccaggg actggtgtg  gccgtcctct actgcttctc caatggggag gtgcagctgg aggttcagaa gaagtggcag  caatggcacc tccgtgagtt cccactgcac cccgtggcct ccttcagcaa cagcaccaag  gccagccact tggagcagag ccaggggcacc tgcaggacca gcatcatctg agaggctgga  gcagggtcac ccacggacag agaccaagag aggtcctgag aggtctggc actgctgtg  gacagccagt ctccccagca gacacctgt gtctccttc agctgaagat gccctcccc  aggccttga ctctccgaa gggatgtgag gcaactgtgg gcaggacaa ggcctgggat  ttggttcgtt tgctctctc ggaagagaag ttcagggggtc ccagaaaggg acagggaaat  aaatggtgcc tgggatgaga ttc</p>	
310	4321	Secretin Receptor	NP_002971.1	<p>MRPHLSPPLQ QLLPVLAC AAHSTGALPR LCDVLQVLE EDDQLQELS REQTGDLGTE P  QPVGCEGMW DNISWPSSV PGRMVEVECP RFLMLTSRN GSLFRNCTQD GWSETFPRPN  IACGVNDS SNEKRHSYLL KLKVMYTVGY SSSLMLLVA LGILCAFRRL HCTRNYIHMH  LFVSEFILRAL SNFIKDAVLF SSDDVTYCDP HRAGCKLMV LFOYCIMANY SWLLVEGLYL  HTLLAISFFS ERKYLQGEVA FGWSPAFV ALWAIARHFL EDVGCWDINA NASIWWIIRG  PVILSILINF ILFINILRIL MRKLRTQETR GNEVSHYKRL ARSTLLIPL FGIHYIVFAF  SPEDAMEIQL FFEALGFSQ GLVAVLYCF LNGEVQLEVO KMQQWHLRE FPLHPVASFS  NSTKASHLEQ SQGTCRTSII</p>	Homo sapiens

311	4480	Somatostatin NM_001049 Receptor Type 1	atgtttcccca atggcaccgc ctctctctct ctctctctct tctctctctc cccgggcagc A tgcggcgaa ggcgggcag caggggcccc caggggcccc ggggcggcg catggaggag ccaggcgaa atgcgtccc gaaagggacc ttgagcgagg gccaggcgag cgccatcctg atctctttca tctactcgt tgcgtatgc caagatgaag acggcaccac acatctacat cctaaatctg tacgtgatcc tgcgtatgc catgctcagc gctgctctgc cgtccctcc tagtccctc cagttgttg gccactggc ccttcggtc gctgctctgc cgtccctcc cagcggtga cgcggtcaac atgttcacca gcatctactg tctgactgtg ctacggcgg cccaccgtgg accgctacgt ggcggtggg catcccatca aggcggccc ctacccctg cccaccgtgg ccaaggtagt aaacctggg gtgtgggtgc tategtgct cgtcatcctg cccaccgtgg tctctctcg caccggg aacagcgacg gcacgggtgg ttgcaacatg ctcatgccc agcccgctca acgtggctg gtgggcttcg tgtgtacac atttctcatg ggttctctgc tgcccggtgg ggtatctgc ctgtgctacg tgctcatcat tgctaagatg cgcattggtg cctcaaggc cggctggcag cagcgcaagc gctcgagcg caagatcacc ttaattggtg tgatggtgtt gatggtgtt gtcatctgct ggatgcttt ctacgtgtg cagctggtta acgtgttg tgagcaggac gacgccacg tgagtcagct gtcggtcatc ctggtgctatg ccaacagctg cgccaaaccc atctctatg gcttctctc agacaactc agcgctctt tccaaagcat cctatgcctc agctggatgg acaacgcgc ggaggagccg gttgactatt acgccaacgc gctcaagagc cgtgcctaca gtgtggaaga cttccaacct gagaacctgg agtccggcgg cgtcttccgt aatggcaact gcacgtccc gatacagac cctctga MFPNGTASSP SSSPSPSPS CGEGGSRGP GAGAADGMEE PGRNASQNGT LSEQQSAIL P ISFIYSVCL VGLCGSMVI YVILRYAKMK TATNIYILNL AIADLLMLLS VPFLVTSTLL RHWPFGALLC RLVLSDAVN MFTSIYCLTV LSVDRYAVV HPIKAARYRR PTVAKVNLG VWVLSLLVIL PIVFSTRFAA NSDGTACNM LMPEPAQRWL VGFVLYTFILM GFLLPVGAIC LCYVLIIAKM RWALKAGWQ QRKRSEKIT LMVMVMVMF VICWMPFYV QLVNVFAEQD DATVSQLSVI LGYANSCANP ILYGFLSDNF KRSFQRIILCL SWMDNAAEEP VDYATATALKS RAYSVEDFQP ENLESGGVFR NGTCTSRITT L	Homo sapiens
312	4480	Somatostatin NP_001040.1 Receptor Type 1	atggacatgg cggatgagcc actcaatgga agccacacat ggctatccat tccatttgac A ctcaatggct ctgtgtgtgc aaccaacacc tcaaacacga cagagccgta ctatgacctg acaagcaatg cagtcctcac attcatctat ttgtgtgtct gcatcattgg gttgtgtggc aacacacttg tcatttatgt catcctccgc tatgccaaga tgaagaccat caccacacatt tacatcctca acctggccat cgcagatgag ctcttcatgc tgggtctgccc ttcttggct atgcagggtg ctctggtcca ctggcccttt ggcaaggcca ttgcccgggt ggtcatgact gtggatggca tcaatcagtt caccagcatc ttctgctga cagtcatgag catcgaccga tacctggctg tggtcaccc catcaagtcg gccaaagtga ggagaccccc gacggccaag atgatcacca tggctgtgtg gggagtctct ctgctggtca tcttgcccat catgatatat gctgggctcc ggagcaacca gtgggggaga agcagctgca ccatcaactg gccagggtgaa tctggggctt ggtacacagg gttcatcatc tacactttca ttctgggggt cctgggtacc ctcaccatca tctgtctttg ctacctgttc attatcatca aggtgaagtc cctggaatc cgagtgggt cctctaagag gaagaagtc gagagaagg taaccgaat ggtgtccatc gtgggtggct tcttcatctt ctgctggctt ccttctaca tattcaactg ttcttccgtc	Homo sapiens
313	4481	Somatostatin NM_001050 Receptor Type 2		Homo sapiens

314	4481	Somatostatin NP_001041.1 Receptor Type 2	tccatggcca tcagcccccac ccagccctt aaaggcatgt ttgactttgt ggtggtcctc acctatgcta acagctgtgc caaccctatc ctatatgcct tcttgtctga caactcaag aagagcttcc agaattgctt ctgcttggtc aaggtgagcg gcacagatga tggggagcgg agtgcagta agcaggacaa atcccggtcg aatgagacca cggagaccca gaggaccctc ctcaatggag acctccaaac cagtactga MDMADEPLNG SHTWLSIPFD LINGSVSTNT SNQTEPYDYL TSNVLTFFIY FVCCIIGLCG P NTLVIYVILR YAKMKITITNI YILNLAIADS LFMGLPFLA MQVALVHWPF GKAI CRVMT VDGINQFTSI FCLTVMSIDR YLAVVHPIKS AKWRPRTAK MITMAVGVLS LILVILPIMIY AGLRSNQWGR SSCTINWPGS SGAWYTGFI YFIIGFLVP LTIICLCYLF IIKVKSSGI RVGSSKRKKS EKKVTRMVIS VAVFIFCWL PFYFNVSSV SMAISPTPAL KGMDFVVLV TYANSCANPI LYAFLSDNFK KSFQNVLCV KVSQDDGER SDSKQDKSRL NETTETQRL LNGDLQTSI	Homo sapiens
315	4482	Somatostatin NM_001051 Receptor Type 3	atggacatgc ttcatccatc atcgggtgctc agacccctcag aacctgagaa tgcctcctcg A gcctggcccc cagatgccac cctgggcaac gtgtcggcgg gcccaagccc ggcagggtcg gccgtcagtg gcgttctgat cccctggtc tacctggttg tgtcgtggt ggcctgctg ggtaactcgc tggatcatc tgggtcctg cggcacacgg ccagccctc agtcccaac gtctacatcc tcaacctggc gctggcggac gagctcttca tgcgtgggt gccctcctg gccgccaga acgcccctgc ctactggccc ttctgctccc tcatgtgcc cctggtcatg gcggtggatg gcatcaacca gtccaccagc atattctgcc tgactgtcat gagctggac cgctacctgg ccgtggtaca tcccaccgc tcggcccgct gcgcacagc tccggtggcc cgcaaggta gcggtgctgt gtgggtggcc tcagcgtgg tgggtgctgc cgtggtggtc ttctcgggag tccccgcgg catgagcacc tgcacatgc agtggccga gccggcggcg gcctggcgag ccggcttcat catctacacg gccgcatgg gcttcttcgg gccgtgctg gtcatctgcc tctgtacct gctcatcgtg gtgaagtgcc gctcagctgg gcgcgggtg tgggcacct cgtgccagcg gcgcggcg cccgaacgca ggtcacgcg catggtggtg gccgtggtg cgtctctgt gctctgctg atgcccctt acgtgctcaa catcgtcaac gtggtgtgcc cactgccga ggagcctgcc ttcttgggc tctacttctt ggtggtggcg ctgccctatg ccaacagctg tgcacacccc atccttctat gcttctcttc ctaccgcttc aagcagggtt tccgagggt cctgctgcg gactcggcg gttgctgag ccaggagccc actgtggggc ccccgagaa gactgaggag gaggatagg aggagaggga tggggaggag agcaggagg ggggcaagg gaaggatg aacggccggg tcagccagat cagcagcct ggcaccagcg ggcaggagcg gccgccagc agagtggcca gcaaggagca gcagctccta ccccaaagg ctccactgg ggagaagtc agcacatgc gcatcagcta cctgtag MDMLHPSSVS TTSEPNASS AWPDPATLGN VSAGPSBAGL AVSGLIPLV YLVVCVGLL P GNSLVIYVVL RHAPSPTVN VYIINLALAD ELEMGLPFL AAQNALSYWP FGSIMCRIVM AVDGINQFTS IFCLTVMSVD RYLAVVHPTR SARWRTPVA RTVSAVWVA SAVVLPVVV FSGVPRGMST CHMQWPEPAA AWRAGFIYT AALGFFGPLL VICLCYLLIV VKRSAGRRV WAPSCQRRR SERRVTRMV AVVALFVLCW MPFYVLNVN VVCPLEEPA FFGLYFLVVA LPYANSCANP ILYGFLSYRF KQGFRRVLLR PSRRVRSQEP TVGPPKTEE EDEEEEDGE SREGGKGEM NGRVSOITQP GTSGQERPPS RVASKEQQLL PQEASTGEKS STMTRISYL	Homo sapiens
316	4482	Somatostatin NP_001042.1 Receptor Type 3		Homo sapiens

317	4483	Somatostatin NM_001052 Receptor Type 4	atgagcgccc cctcgacgct gccccccggg ggcgaggaag ggctggggac ggctggggccc A tctgcagcca atgccagtag cgtccggcg gaggcgagg aggcgtggc gggcgccggg sapiens gacgcgggg cgcggggcat ggtcgctatc cagtgcattc acgcgtggt gtgcctggtg gggctgggtg gcaacgcctt ggtcatcttc gtgacccctt gctacgcaa gatgaagacg gtaccacca tctacctgct caacctggcc gtagccgacg agctcttcat gctgagcgtg cccttcgtgg cctcgtcggc cgccctggc cactgcccct tggctccgt gctgtgccg gcggtgctca gctgcagcg cctcaacatg ttaccacagc tcttctgtct caccgtgctc agcgtggacc gctacgtggc cgtggtgac cctctgccc cgcgaccta ccggcgggccc agcgtggcca agctcatcaa cctggcggtg tggctggcat cctgttgggt cactctcccc atcgccatct tgcgagacac cagacgggt cggcgggccc aggcgtggc ctgcaacctg cagtggccac accggcctg gtcggcagtc ttgctgggtc acacttctc gctgggcttc ctgctgccg tgcctggccat tggcctgtgc tactgtctca tctgggcaa gatgcggcc gtggccctgc gcgctggctg gcagcagcg aggcgctcgg agaagaaaat caccagcgtg gtgctgatgg tgcgtgctgt ctttgtgtc tgcgtgatgc ctttctact ggtgcagctg ctgaacctcg tgcgtgaccag ccttgatgc accgtcaacc acgtgtccct tatectcagc tatgccaaca gctgcgcca ccttattctc tatgcttcc tctccgaaa ctcccgcca tccctccagc ggttctctg cctgcgtgc tgcctcctgg aagtgctgg agtgctgag gaggagcccc tggactacta tgcactgtc ctaacagaca aagtggggc aggtgcatg tgccccccac taaaatgcca gcaggaagc ctgcaaccag aaccgggcc caagcgcatc ccctcaccac ggaccaccac cttctga 318	4483	Somatostatin NP_001043.1 Receptor Type 4	MSAPSTLPPG GEGIGTAMP SAANASSAPA EAEEAVAGPG DARAAGMVAI QCIYALVCLV P GLVGNALVIF VILRYAKMT ATTIIYLLNLA VADELEMLSV PFVASSAALR HWPFSGVLGR sapiens AVLSVDGLNM FTSVCLTVL SVDRYVAVH PLRATYRRP SVAKLINLGW WLASLLVTLPL IAIFADTRPA RGGQAVACNL QWPHPAWSAV FVVYTFLLGF LLPVLAIGLC YLLIVGKMRA VALRAGWQQR RRSEKKITRL VLMVAVFVL CWMFFVYVQL LNLVWTSIDA TVNHVSLILS YANSCANPIL YGFLSDNFRR SFQVLCRLC CLLEGAGGAE EEPLDYATA LKSKGGAGCM CPPLKCQQA LQPEGRKRI PLTRTTTF 319	4484	Somatostatin NM_001053 Receptor Type 5	atggagcccc tgttccagc ctccagccc agctggaacg cctcctcccc gggggtgccc A tctggaggcg gtgacaacag gacgtggtg gggcgggcg cctcggcagg ggcggggcg sapiens gtgctgggtg ccgtgctgta cctgtggtg tgtgcggcg ggtggggcg gaacacgctg gtcatctacg tggctgctg cctcgccaag atgaagacg tcaccaaat ctacattctc aacctggcag tggcgacgt cctgtacatg ctggggctgc ctttctctggc cagcgagaac gccgctcct tctggccctt cgccccctc ctgtgccgc tggctcatgac gctggacggc gtcaaccagt tcaccagtgt cttctgctg acagtcatga gcgtggaccg ctacctggca gtggtgcacc cgtgagctc gggcgctgg cgccggcgc gtgtggccaa gctggcgagc gccgcgccct ggttctgtc tctgtgcatg tgcgtgcgc tcctggtgtt cgcgacgtg caggaggcg gtacctgcaa cgccagctg ccggagcccc tggggctgtg gggcgccgtc ttcatcatct acacggcgt gctgggcttc ttgcggcgc tgcctgtcat ctgcctgtgc tacctgctca tgcgtgtgaa ggtgaggcg gcggcgctgc gcgtgggctg cgtgcggcg cgctcggagc ggaaggtgac gcgcatggtg ttggtgggtg tgcgtgtgtt tgcgggatgt tggctgccct tcttaccgt caacatcgtc aacctggcg tggcgctgccc ccaggagccc
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320	4484	Somatostatin Receptor Type 5	NP_001044.1	MEPLFPASTP	SWNASSPGAA	SGGDNRTLV	GPAPSAGARA	VLVPVLYLLV	CAAGLGGNTL	P	Homo sapiens	
				VIYVLRFAK	MKTVTNIYIL	NLAVADVLYM	IGLPFLATQN	AASFWPFGPV	LCRLVMTLDG			
				VNQFTSVFCL	TVMSVDRYLA	VHPLSSARW	RRPRVAKLAS	AAAWLSLCM	SLPLLVFADV			
				QEGGTCSASW	PEPVGIMGAV	FIITAVLGF	FAPLLVICLC	YLLIVVKVRA	AGVRVGCVR			
				RSEKVTIRMV	LVVVLVFAGC	WLFFFTVNIV	NLAVALPQEP	ASAGLYFFVV	ILSYANSCAN			
				PVLYGFLSDN	FRQSFQKVL	LRKSGSAKDA	DATEPRPDRI	RQQEATPPA	HRAAANGIMQ			
				TSKL								
321	4552	Tachykinin Receptor 1	NM_001058	aattcagagc	caccgcgggc	aggcggggcag	tgcatccaga	agcgtttata	ttctgagcgc	A	Homo sapiens	
				cagttcagct	ttcaaaaaga	gtgctgccc	taaaaagcct	tccaccctcc	tgctgtgctt			
				agaaggacc	tgagcccccag	gcgccagcca	caggactctg	ctgcagaggg	gggttgtgta			
				cagatagtag	gctttacgcc	tagcttcgaa	atggataaac	tccctccggt	ggactcagac			
				ctctcccaa	acatctccac	taacacctcg	gaacccaatc	agttcgtgca	accagcctgg			
				caaatgttcc	tttgggcagc	tgccctacac	gtcattgtgg	tgacctctgt	ggtggggcaac			
				gtggtagtga	tgtggatcat	cttagccccc	aaaaaata	ggacagtgc	gaactatttt			
				ctggtgaacc	tggccttcgc	ggaggcctcc	atggctgcac	tcaatagcag	ggtgaacttc			
				acctatgctg	tccacaacga	atggtactac	ggcctgttct	actgcaagtt	ccacaacttc			
				tttcccatcg	cgcgtgtctt	cgccagtatc	tactccatga	cggctgtggc	ctttgatagg			
				tacatggcca	tcatacatcc	cctccagccc	cggctgtcag	ccacagccc	caaatgtgtc			
				atctgtgtca	tctgggtcct	ggctctcctg	ctggccttcc	ccagggcta	ctactcaacc			
				acagagacca	tgcccagcag	agtcgtgtgc	atgatcgaat	ggccagagca	tccgaacaag			
				atttatgaga	aagtgtacca	catctgtgtg	actgtgctga	tctacttctc	ccccctgctg			
				gtgattggct	atgcatacac	cgtagtgga	atcacactat	gggccagtga	gatccccggg			
				gactcctctg	accgttaacca	cgagcaagtc	tgtgcgaagc	gcaaggtggg	caaaatgatg			
				attgtcgtgg	tgtgcacctt	cgccatctgc	tgggtgccct	tccacatctt	cttctcctctg			
				ccctacatca	accagatct	ctacctgaag	agttttatcc	agcaggtcta	cctggcccatc			
				atgtggctgg	ccatgagctc	caccatgtac	aaccctatca	tctactgctg	cctcaatgac			
				aggttcctgc	tgggcttcaa	gcatgccttc	cgggtctgcc	ccttcacag	cgcgcggcgac			
				tatgaggggc	tggaaatgaa	atccaccggg	tatctccaga	ccaggggcag	tgtgtacaaa			
				gtcagccgcc	tggagaccac	catctccaca	gtgggtgggg	ccacagagga	ggagccagag			
				gacggcccca	aggccacacc	ctcgtccctg	gacctgacct	ccaaactgctc	ttcacgaaagt			
				gactccaaga	ccatgacaga	gagcttcagc	ttctctcca	atgtgctctc	ctaggccaca			
				gggcctttgg	caggtgcagc	ccccactgcc	ttgcacctgc	ctcccctcat	gcattggaaat			
				tcccttcac	tggaaacctc	agaaacacc	ttcacctggg	acttgcaaaa	agggtcagta			
				tgggttaggg	aaaacattcc	atccttgagt	caaaaaatcc	caattcttcc	ctatctttgc			
				caccctcatg	ctgtgtgact	caaaccacaa	cactgaactt	tgctgagcct	gtaaaaataa			
				aggtcggacc	agcttttctc	caagagccca	atgcattcca	ttctggaag	tgactttggc			



322	4552	Tachykinin Receptor 1	NP_001049.1	tgcatgcgag tgctcatttc aggatg
323	4687	Thrombin Receptor	NM_001992	<p>           MDNVLVDS LSPNISTNTS EPNQFQPAW QIVLWAAAYT VIVVTSVVG VVVMWILLAH P            KRMRTVTNYF LVNLAFAEAS MAAFTNVNF TVAVHNEWY GLFYCKFHF FPIAAVFASI            YSMTAVAFDR YMAIIHPLQ RLSTATKV ICVIWLALL LAFPGYYST TETMPSRWVC            MIEWPEHPNK IYKVVHICV TVLIYFLPL VIGYAYTWG ITLWASEIPG DSSDRYHEQV            SAKRKVKMM IVVCTFAIC WLPEHIFLL PYINPDLYL KFIQVYLAI MWLAMSSTMY            NPIIYCCLND RFLGFKHAF RCCPFISAGD YEGLEMKSTR YLQTQGSVYK VSRLETTIST            VVGAHEEPE DGPKATPSSL DLTSNCSSRS DSKMTTESFS FSSNVL         </p> <p>           ggcggggggc gcacagagcc agaggggctt gcgagggcgc gctgagggag cgcggggaggg A            ggcggggcgc ggcctccagc gcagagactc tcaatgcacg ccggaggccc ctctctcgct            ccgcccgcgc gaccggcgc ccaggtccc ccgcggccc ctaaccggcc cagacacagc            gctgcgcgag gctgcgttgg acctgatct taccgtggg caccctgccc tctgcctgccc            gcgaagaccg gctcccgcac ccgcagagc cgcagagag ggtgaagcgg agcagcccga            ggcggggcgc cctcccgcgc cagcggcgc ggcggggcgc gacaatgggg ccgcggcgcc            tgctgctggt ggcggcctgc ttcagtctgt ggcggcgcgt gttgtctgcc cgcacccggg            ccgcaggcc agaatacaaa gcaacaaatg ccacttaga tccccggtca ttcttctca            ggaaccccaa tgataatat gaaccatttt ggagagatga ggagaaaaat gaaagtgggt            taactgaata cagattagtc tccatcaata aaagcagtc tctcaaaaa caacttctctg            cattcatctc agaagatgcc tccggatatt tgaccagctc ctggctgaca ctctttgtcc            catctgtgta caccggagtg tttgtagtca gcctccact aaacatcatg gccatcgttg            tggtcatcct gaaaatgaag gtcaagaagc cggcggtgggt gtacatgctg cacttgccca            cggcagatgt gctgttttgt tctgtgctcc ctttaagat cagctattac tttccggca            gtgattggca gtttgggtct gaattgtgtc gcttgctcac tgcagcattt tactgtaaca            tgtaacgctc tatcttgctc atgacagtca taagcattga ccggtttctg gctgtgtgtg            atcccatgca gtcccctctc tggcgtagtc tgggaagggc ttccttcaat tgtctggcca            tctgggcttt ggccatgca ggggtagtgc ctctgctct caaggagcaa accatccagg            tgcccggtct caacatcact acctgtcatg atgtgtctaa tgaacacctg ctogaaggct            actatgccta ctacttctca gcttctctg ctgtcttctt ttttgtgccg ctgatcattt            ccacggctcg ttatgtgtct atcattcgat gtcttagctc tcccgagtt gccaacgcga            gcaagaagtc ccgggctttg ttcctgtcag ctgctgtttt ctgcatcttc atcatttgt            tcggacccac aaacgtctc ctgattgccc attactcatt ccttctcact acttcacca            cagaggctgc ctactttgct tacctctct gtgtctgtgt cagcagcata agctcgtgca            tcgacccccct aatttactat tacgttctct ctgattgcca gaggtagctc tacagtatct            tatgtcgcaa agaaagtctc gatccacga gttataacag cagtgggcag ttgatggcaa            gtaaaatgga tacctgctct agtaacctga ataacagcat atacaaaaag ctgttaactt            agaaaaagg actgctggga ggttaaaaag aaaagttaac aaagtgaat accctggaga            tctctattagt cccaccccaa actttattga ttcacctctt aaaaacacag atgtacgact            tgcatacctg ctttttatgg gagctgtcaa gcatgtattt ttgtcaatta ccagaaagt            aacaggacga gatgacggtg ttattccaa ggaatattgc caatgctaca gtaataatg            aatgtcactt ctggatatag ctaggtgaca tatacactac tacatgtgtg tatatgtaga         </p>

324	4687	Thrombin Receptor	NP_001983.1	<p> tgtatgcaca cacatatatt atttgcagtg cagtatagaag taggcacttt aaaaactctt  ttccccgcac ccagcaaat atgaaaataa tctctgattc cctgatttaa tatgcaagt  ctaggttggt agagttagc cctgaacatt tcatggtgtt catcaacagt gagagactcc  atagtttggg ctgtaccac tttgtcaat agtgtattt tgaattgtt tgacggcaag  gtttaagtta ttaagaggt agacttagta ctatctgtgc gtagaagttc tagtgtttc  aattttaaac atatccaagt ttgaattcct aaaaattatgg aaacagatga aaagcctctg  ttttgatag ggtagatttt ttacatttt acacactgta cacataagcc aaaactgagc  ataagtcctc tagtgaatgt aggtggctt tcagagttagg ctattcctga gagctgcatg  tgtccgcccc cgatggagga ctccaggcag cagacacatg ccagggccat gtcagacaca  gattggccag aaaccttctt gctgagcctc acagcagtga gactggggcc actacattg  ctccatctc ctgggattgg ctgtgaactg atcatgttta tgagaaactg gcaagcaga  atgtgatac ctaggaggtg atgaccatga aagacttctc taccatctt aaaaacaacg  aaagaaggca tggacttctg gatgcccac cactgggtgt aaacacatct agtagttgtt  ctgaaatgtc agttctgata tggaaagcacc cattatgcgc tgtggccact ccaatagggtg  ctgagtgtag agagtgaat agacagaga cctgcccctca agagcaaat agatcatgca  tagagtgtga tgtatgtga ataatatgt ttacacaaa caaggcctgt cagctaaaga  agtttgaaca ttgggttac tattctgtt gttataact taatgaaac aatgcagtagc  aggacataa ttttttaaaa taagtctgat ttaattgggc actatttatt tacaaatgtt  ttgctcaata gattgtcaa atcaggtttt cttttaagaa tcaatcatgt cagtctgctt  agaaataaca gaagaaaata gaattgacat tgaattctag gaaaattatt ctataatttc  cattactta agacttaatg agactttaaa agcatttttt aacctcctaa gtatcaagta  tagaaaatct tcatggaatt cacaagtaa ttggaaatt aggtgaaac atatctcta  tcttacgaaa aaatggttagc attttaaca aaatagaag ttgcaaggca aatgtttatt  taaaagagca gccaaggcgc ggtggtcac cctgtaatc ccagcacctt gggaggctga  ggcgggtgga tcacgaggtc aggatcgga gaccatcctg gctaacacgg tgaaacccgt  ctctactaaa aatgcaaaaa aaattagccg ggcgtggtgg caggcacctg tagtcccagc  tactcgggag gctgaggcag gagactggcg tgaacccagg aggcggacct tgtagtgagc  cgagatcgcg ccactgtgct ccagcctggg caacagagca agactccatc tc  MGPRRLLLVA ACFSLCGPLL SARTRARRPE SKATNATLDP RSFLLRNPND KYEPFWEDEE P  KNESGLTEYR LVSINKSPL QKQLPAFISE DASGYLTSSW LTLFVPSVYT GVFWVSLPLN sapiens  IMAIWVFLK MKVKKPAVVY MLHLATADVL FVSVLPFKIS YVFGSDWQF GSELCRFVTA  AFYCNMYASI LLMTVISIDR FLAVVYPMQS LSWRTLGRAS FTCLAIWALA IAGVPLVLK  EQTIQVPLN ITTCHDVLE TLLEGYYAYY FSAFSAVFFF VPLIISTVCY VSIIRCLSSS  AVANRSKSR ALFLSAVFC IFIICFGPTN VLLIAHYSFL SHTSTTEAAY FAYLLCVCS  SISSCIDPLI YYYASSEQR YVYSILCKE SSDPSSYNSS GQLMASKMDT CSSNINNSIY  KKLLT </p>	Homo sapiens
325	4734	Thyrotropin Releasing Hormone Receptor	NM_003301	<p> tagcttcaag ccaactgaaga tggaaaacga gacagtcagt gaactgaacc aaacacagct A  tcagccacga gcagtggtgg ccttagaata ccagtggtgc accatcttac ttgtactcat  tatttggtgc ctgggcatg taggcaacat catggtagtc ctggttgtca tgaagaacaa  gcacatgagg acccccacaa actgctacct ggtgagcctg gcagtagctg atctcatggt  cttgggtggc gcaggcctcc ccaacataac agacagtatc tacggttcct gggtctatgg </p>	Homo sapiens

326	4734	Thyrotropin Releasing Hormone Receptor	NP_003292.1	<p>ctatgttgga tgcctctgca ttacttaacct ccagttatttg ggaattaatg catcctcttg</p> <p>ttcaataaca gcctttacca ttgagaggtg catagcaatc tgtcacccca tcaagcccca</p> <p>gtttctctgc acattttcca gagccaaaaa gattatcatc tttgtctggg ctttcacatc</p> <p>tctttactgt atgctctggt tcttcttgct ggtatccaat attagcacct aaaaagatgc</p> <p>tattgtgata tctgtgggt acaagatctc caggaattac tactcaccta ttacctaata</p> <p>ggactttggt gtcttttatg ttgtgccaat gactctggct accgtctctc atggattcat</p> <p>agctagaatc cttttcttaa atcccattcc ttcatagctc aaagaaaaat ctaagacatg</p> <p>gaaaaatgat tcaacccatc agaacacaaa tctgaatgta aatacctcta atagatgttt</p> <p>caacagcaca gtatcttcaa ggaagcaggt caccagatg ctggcagtg ttgtaattct</p> <p>gtttgcccct ttatggatgc cctacaggac tctagtgggt gtcaactcat ttctctccag</p> <p>tcctttccaa gaaaattggt tttgtctct ttgcagaatt tgcatttacc tcaacagtgc</p> <p>catcaacccg gtgatttaca atctcatgtc ccagaattc cgtgcagcct tcagaaaagct</p> <p>ctgcaactgc aagcagaagc caacagagaa acctgctaac tacagtgtgg cctaaaatta</p> <p>cagcgtcatc aaggagtcag accttttcag cacagagctt gatgatata ctgtcactga</p> <p>cacttacctg tctgcccaca aagtgtcttt tgatgacacc tgcttggtct ctgagggtatc</p> <p>ctttagccaa agttgatcca tgaattagaa gaaaatggat gacaaaagaa ttgagaatct</p> <p>gtgcagtcac caacaaaagg gagaacatgg ccaatagtc tctgtgaaga cagagcagat</p> <p>cagctcttgg caatgctcta acaaacccg</p>	Homo sapiens
327	4944	Angiotensin II Type 1 Receptor	NM_000685	<p>LVLIICGLGI VGNIMVVLVV MRTKHMRTPT P</p> <p>ITYLQYLGIN ASSCSITAFI</p> <p>FFLDLNIST YKDAIVISCG</p> <p>NPISDPKEN SKTWKNDSTH</p> <p>PYRTLIVVNS FLSSPFQENW</p> <p>PTEKPANYSV ALNYSVIKES</p> <p>SEVSFSQS</p> <p>agccagggacc ccaggcagca A</p> <p>tctgcccggc cgcgccggtg</p> <p>cgcacagccg ggacgcccag</p> <p>gcgggacgtg acgcagcgcg</p> <p>atctaaaaatg gctgggtttt tatctgaata</p> <p>tgatatatag ttgtgcaaca</p> <p>ctgaagatgg tattaaaaa</p> <p>tattgtcat gattcctact</p> <p>gcttggtggt gatagtcat</p> <p>tttgaattt agcactggct</p> <p>acacagctat ggaataccgc</p> <p>gcgtcagttt caacctgtac</p> <p>acctggctat tgttcaccca</p> <p>tcaactgcat catcatttgg</p> <p>gaaatgtatt ttctattgag</p> <p>aaattcaac ccttcagata</p>	Homo sapiens

Accession	Gene	Protein	Species
328	Angiotensin II Type 1 Receptor	4944	Homo sapiens
329	Angiotensin II Type 2 Receptor	4946	Homo sapiens

330	4946	Angiotensin II Type 2 Receptor	NP_000677.1	<p> tttggtgtat ggctgtgttg tctcattgc caacatttta ttttcgagac gtcagaacca  ttgaatactt aggagtgaat gcttgcattha tggctttccc acctgagaaa tatgccaat  ggcagctgg gattgcctta atgaataata tccctgggtt tattatccct ttaataattca  tagcaacatg ctatttttga attagaaaac acttaactgaa gacgaatagc tatgggaaga  acaggataac ccgtgaccaa gtcctgaaga tggcagctgc tgtgttctg gccttcata  tttggtgctt tcccttccat gttctgacct tccctgagtc tccctttgct atggtgtgca  ttaatagctg cgaagtata gcagtcattg accttgacct tccctttgct atcctcttgg  gattcaccaa cagctgcgtt aatccgtttc tgtattgttt tgttgaaaac cgtttccaac  agaagctccg cagtggtgtt aggtttccaa ttacttggct ccaagggaaa agagagagta  tgtcttgccg gaaaagcagt tctcttagag aatggagac ctttgtgtct taaacggaga  gcaaaatgca tgaatacaac atggctactt gctttgagc tcaccagaat tatttttaag  tggttttaat aaaaataaa aatttccct aatctttct gaacttctg aaaccaaag  taactatgtt tatcgtccag tgactttcag gaatgccat tgttttctga tatgtttgta  caagatttca ttggtgagac atatttaca cctagaagta actggtgata tatctcaaat  tgtaattaat aatagattgt gaataatgat ttgggattc agatttctct ttgaacacatg  cttggtttc ttagtgggtt ttatatcca tttttatcag gatttctct tgaaccagaa  ccagctttc aactcattgc atcattaca agacaacatt gtaagagaga tgagcacttc  taagttgagt atattataat agattagtagc tggattattc aggttttagg catatgcttc  tttaaaaacg ctataaatta tattctctt gcatttccat tgagtggagg ttatagttta  atctataact acatattgaa tagggtcagg aatatagatt aatcactact cctatgcttt  agcttatttt tacagtata gaaagcaaga tgtactataa catagaattg caatctataa  tattgtgtg ttcactaac tctgaataag cactttttta aaaaacttct actcatttta  atgattgttt aaaggtttct attttctctg atactttttt gaaatcagta aacactgtgt  attgtgttaa atgtaaagg tcacttttca catccttgac tttttagatg tgctgctttg  atatatagga cattgattg atttttatta ttaatgcttt ggttctgggt tgtttcctaa  aatatctggg tggcttaaaa aaaactcttt aacttgtaat aaacctttaa ctggcatagg  aaatggtatc cagaatggaa ttttgcatac tggggtctg gtgggggcaa agagacccag  tcaattacat gtttgtacc aagaaaggaa cctgtcaggg cagtacaatg tgactttgaa  aatatatacc gtgggggtag ttttacccta tatctataa cactgtttgt tccagaatct  gtatgattct atggagctat tttaaacca ttcaggtctc aga  MKGNSTLATP SKNITSLHF GLVNISGNNE STINCSQKPS DKHLDAIPIL YYIIFVIGFL P  UNIVVTLFC CQKPKKVSS IYIFNLAVAD LLLATLPLW ATYYSRYDW LFGPVMCKVF  GSFLTLMFA SIFFITCMVS DRYQSVIYPF LSQRNPWQA SYIVPLVWCM ACLSSLPTFY  FRDVRTIEYL GVNACIMAFP PEKYAQWSAG IALMKNILGE IIPLIFIATC YGIRKHLK  TNSYGNRIT RDQVLKMAAA VVLAFLIIMCL PFHVLTLFLDA LAMGVINSC EVIAVIDLAL  PFAILLGFTN SCVNPFLYCF VGNRFQOKLR SVFRVPITWL QGKRESMSCR KSSSLREMET  FVS </p>	Homo sapiens
331	5072	Pyrimidinerg ic Receptor P2Y4	NM_002565	<p> atggccagta cagagtctc cctgttgaga tccctaggcc tcagcccagg tccctggcagc A  agtggagtg agctggactg ttggtttgat gaggatttca agttcatcct gctgcctgtg  agctatgcag ttgtctttgt gctgggcttg ggccttaacg cccaacccct atggctcttc  atcttcgcc tccgaccctg ggatgcaacg gccacctaca tgttccacct ggcattgtca </p>	Homo sapiens

332 5072 Pyrimidinerg NP\_002556.1  
ic Receptor  
P2Y4

gacacctgt atgtgtgtgc gctgcccacc ctoatctact attatgcagc ccacaaccac  
tgccctttg gcaatgagat ctgcaagtcc gtcgcttttc tttctattg gaacctctac  
tgcaagtcc tttctctcac ctgcatcagc gtgcacccgt acctgggcat ctgccacca  
cttcggggcac tacgctgggg cgcgcctcgc ctgcgaggcc ttctctgect ggcagtttgg  
ttggtcgtag cgggctgcct cgtgcccacc ctgttctttg tcacaaccag caacaaggg  
accacgctcc tgtgccatga caccactcgg cctgaagagt ttgaccacta tgtgcactc  
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tgtgtgtgtg gaaagcccca gcccgcacg gctgctctt ccttggcact agtgcctctg  
cctgaggata gcagctgcag gtggggcgcc acccccagg acagtagctg ctctactct  
agggcagata gattgtaa

IFRLRPWDAT ATYMFHIALS SEVELDCWFD EDFKFIPLPV SYAWFVLGL GLNAPTLLWF P  
CSVLFLTCIS VHYIGICHF LRALRWGRPR LAGLCILAVW LVVAGCLVNP LFFVTSNKG  
TTVLCHDTRR PEEFDHYVHF SSAVMGLLEG VPCLVTLVY GIMARRLYQP LPGSAQSSSR  
LRSRLTIADV LTFEAVCFVP FHITRTIYLL ARLLLEDCRV LNIVNVYKV TRPLASANSC  
LDPVLYLLTG DKYRRLRQL CGGKQPRT AASSIALVSL PEDSSCRWAA TPQDSSCSTP  
RADRL

Homo  
sapiens

333 5117 Vasopressin NM\_000706  
V1A Receptor

taattgcttg aaggattttt tccagacagg tggcttgaa acctttacc tattacctc A  
catccctgaa ccattcoaat ctctgcctc ctggatatct tggagaaat gaaccaacac  
aacacagctt tcagtttcta gagcatttcc ccatacaga acattgtctt acttgatctt  
cccgatgacc tcaacaacag gaaaggcagg tcccttcatt tccatttata agacgcacag  
accaggatt atctagccac aggaagcagg actccagatt tcaagtcagg catctcaacg  
tgacaacctt ggtaactctg catgaacgga ctggatagta aagtggaaat attactgaga  
actgcaatga ataaatctt ttgcatctt tgcctacgt tcacagaggg tgatatctt  
ctgaggcaat taaattata ccacggccc aatactgaa cgttctgacc acaaaagtca  
tgctcctgca tctacacagc agataactgc agaaacggct tcccttcttc ctgtaaaaa  
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ctttgagatt gcctcttct tactcctgag cacaggagcc gggcggggtt tctgtccctt  
gcccggaca gcactgcctg gatggcgcgt gtccggcagc tgctctttgt ccacccaaaa  
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ccgccatccc cgctgtggga atcaggcttt tcccgcagaa aacccaggga atctagagaa  
aactccttaa gtcccctagtc tccatagaga aaaccaggag acactcccc caaacccgc  
tgtgaatata ggacacgacg ccaactggggc ctgaaagtga tgagtgcgtt ctccccgtg  
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Homo  
sapiens

agtcacgagg gggagagaaat gtttgcccg gaaaaatttg cctgggggaat aaaaattgac  
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tccggcaata gggcgggagg gagcgcgtcc caggaagaca agcacgcgat aaatacttga  
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aaaaaggcag agcagggaga ggggccagct caccctgctg agagctgctc agtgggcagg  
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gcgcaaaaga cctgcgctt cggacgagga gcccaagtcc tccgagacgg ggagggagcg  
cgccgcgagg gctggagctc cgaagagggc cgahtagtag ctgcatggac agcatgcgtc  
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gtaatccctg gataacatg ttttttagtg gccatctcct tcaagactgt gttcaagct  
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gaagacagac tttttattct aacaatcgaa gcccaacaaa cagtacgggt atgtggaagg  
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catgcaactt gattcttctg attgactttt tggctcataa gctgaattga gctagaaatc  
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gtttctagt gcattttcat attgctacca aaaactagac attattttgt atggaatatt  
aatggaaaca tgctgtacta aaatatgcag gtctgattcc cagaaataca acagaagtta  
tatttttaa ggaataata taaccacct agctttatat tttgtgttta gtttcttta  
ttttcatttc taacataagt aagacttgat tggtttaaaa gtcacataaa atgcggcact

334	5117	Vasopressin V1A Receptor	NP_000697.1	<p>atttctgaac aaagagagct catcatcagt cttaatatct agagaaaaact tcagagaaaaat  tatgttttca tccattaaaaa ttaatttggt catcagaaaaa tgcagcctta aacagtgtcc  aggagatggg atggtacctc ctaggagtac aagtgcctgg ggtgtaataga gctcctgctc  attgtggcca gtttagagtt ctattagaag ctatcaatca ccttgcatatt caaaatggta  actttacaac tggcagtggc ctccctttgg ttccctacat attattggctc aagaaaaagca  tgaaaactga gatgctgaag gtgagaggaa atggtgactg gccaaaaata tctttttcc  cccactgcaa ggttggtttta agtcagatt tgtataagga agccaaaatt ttattaaaaa  agtataaaa gattgcttaa ggtactctgg actttctctt ggacattgta aacgtatttt  gatcagattt acaagggtat cctgtgctat gctggacatt acaaatgata ttatcttcat  gtttggggaa ttc</p>	Homo sapiens
335	5118	Vasopressin V1B Receptor	NM_000707	<p>MRLSAGPDAG PSGNSSPWMP LATGAGNTR EAEALGEGNG PPRDVRNEEL AKLEIAVLAV P  TEFAVLGNS SVLLALHRTF RKTSRMHLFI RHLSLADLAV AFFQVLPQMC WDTYFRFGP  DWLCRVVKHL QVFGMFASAY MLVMTADRY IAVCHPLKTL QQPARRSRML IAAAWVLSFV  LSTPOYFVFS MIEVNNVTKA RDCWATFIQP QAGVAFQKGF LLAPCVSSVK SISRAKIRTV KMTFVITAY  YNIWCNVRGK TASRQSKGAE QAGVAFQKGF LLAPCVSSVK SISRAKIRTV KMTFVITAY  IVCWAFFFI QMWSVWDPMs VTSEENPTI TITALLGSLN SCCNPWIYMF FSGHLLQDCV  QSFPCQNMK EKENKEDTDS MSRRQTFSYN NRSPNTSTGM WKDSPKSSKS IKFIPVST</p>	Homo sapiens
335	5118	Vasopressin V1B Receptor	NM_000707	<p>ctccagcgc tgctcaccag gcagagcgag cgggcttggc tggggtcttc tgccctgagc A  gcgacacga ctgctccgga ccgcgcctcc agcagagctg aagggtcttc gctcttggct  tcagaaaaa ggttggagaa gagaatttga ggcgagttgg aggtggttag cccctcccca  gccttcttc tctccagaa gctcactct gcacacgctc cccattctt ccgctcctga  tccccatct tctgacccc tcttctccc tctctgggt cgateccagt cacattttct  ccttcggaat ctcatctcc ctctcctct ctatccagt cctctgaacg atttccgct  atttggaaag ctctccctg tcattctcaa cgttctctt ttctctccac ctccctgct  actccatttt atccatcaaa cctctccact tggatccaca cctcccttc atcttccct  cccagcaaac ctgtgctcat gattctggc ctctgtggga tggcaacccc accctcggg  gcacctctc tgcccccaat gccacaacac cctgtgtggg cgggatgag gagctggcca  aggtggagat cggagtcctg gccactgtcc tgggtgtggc gaccggggg aacctggctg  tgctgtgac cctgggcccag ctgggcccga agcgtctccg catgcacctg ttctgtctgc  acttagccct gacagacctg gccgtggcgc tcttccaggt gctgccacag ctgctgtggg  acatcaccta ccgttccag gccccgacc tctgtgtag gcccgtcaa g tacctgcagg  tgctcagcat gtttgcctcc acctacatgc tgctggccat gacgtggac cgctacctgg  ctgtctgtca cccctgcgc agcctccagc agccaggcca gtccacctac ctgtctcatc  ctgtccctg gctgtgtggc gccatcttca gctccctca agtcttcat tttccctgc  gggaggtgat ccagggtctca ggggtgtgag actgtgtggc agacttcggc ttcccttggg  ggccacgggc ctacctcacc tggaccaccc tggctatctt cgttctgccc gtgacctgc  tcacggcctg ctacagctc atctgccatg agatctgtaa aaacctaaaa gtcaagacac  agccctggcg ggtggaggga gggggtgga ggacttggga caggccctca ccttccacct  tagctgccac cactcggggg ctgccatctc gggtcagcag catcaacacc atctcaggg  ccaagatccg aacagtgaag atgaccttg tcatcgtgct ggcctacatc gcttctggg  ctccctctt cagtgtccag atgtgggtccg tgtggggaca gatgacctt gatgaagatt</p>	Homo sapiens



336 5118 Vasopressin NP\_000698.1 MDSGPLWDAN PTPRGTLISAP NATTPWLGRD LAVALFQVLP QLLWDITYRF QGPDLLCRAY KYLQVLSMFA GNLAVLLTLG P Homo sapiens  
V1B Receptor

ccaccaatgt ggctttccacc atctctatgc ttttgggcaa cctcaacagc tgcctgcaacc  
cctggatcta catgggcttc aacagccacc tgttacgcgc gccctgcgt caccctgcct  
gctgtggggg tccccagccc aggatgcgc gggggtcttc cgacggcagc ctctcgagcc  
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aagggttga gttagaggag gccctgtctg aagcagagcc aaaaggccag aatgggtccc  
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ctctatttgg atcctggatt tgttgttgtt gttgttgttg ttgttagaga gaa  
QLGRKRSRMH LEVLHLALTD NATTPWLGRD EELAKVEIGV LATVLVIATG GNLAVLLTLG P  
STYMLLAMTL DRYLAVCHPL RSLQPGQST YLLIAAPWLL AAIFSLPQVF IFSREVIQ  
SGVLDCAWDF GFWGPRAYL TWTLAIFVL PVTMLTACYS LICHEICKNL KVKTQAWRVG  
GGWRTWDRP SPSTLAATTR GLPSRVSSIN TISRAKIRTV KMTEFIVILAY IACWAPFFSV  
QMWVWDKNA PDESDTNVAF TISMLLGNLN SCCNWIYMG FNSHLLPRPL RHLACCGGPQ  
PMRRRLSDG SLSRHTLL TRSSCPATLS LSLSLTISGR PRPEESPRDL ELADGEGTAE  
TIIF

337 5119 Vasopressin NM\_000054 agaagatcct gggttctgtg catcctgtg tctgacatc cctctcaatc ttccctgccc A Homo sapiens  
V2 Receptor

aggactggcc atactggcac cgcacacgtg cacacagcc aacaggcatc tgccatgctg  
gcatctctat aagggtctca gtccagagac cctgggccat tgaacttgct cctcaggcag  
aggctgagtc cgcacatcac ctccaggccc tcagaaacac tgccccagcc ccaccatgct  
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cctggccgac ctggccgtgg ctctgttcca agtctgtccc cagctggcct ggaaggccac  
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catgtatgcc tctcctaca tgatcctggc catgacgtg gaccgccacc gtgccatctg  
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gaggcctggg gggcgccgca ggggacgccg gacaggcagc cccggtgagg gagccccgt  
gtcagcagct gtggccaaga ctgtgaggat gacgctagt attgtgtgct tctatgtgct  
gtgctgggca ccttctctcc tgggtgcagct gtgggcccgc tgggacccgc aggcacctc

338	5119	Vasopressin V2 Receptor	NP_000045.1	MLMASTTSV ALARRGRRGH VGMAYASSYMI RNVEGGSGVT SERPGGRRRG PLEGAPFVLL ASSSLAKDTS	PGHPSLP WAPIHVF LAMTIDRHR DCWACFAEPW RRTGSPGEGA MLLASLNSCT S	SNSSQERPLD LCLADLAVL ICRPMLAYRH GRRTYVTWIA HVSAAVAKTV NPWIIYASFSS SVSSELSRL	TRDPLLRAE FQVLPQLAWK GSGAHWNRPV LMVFVAPTIG RMTLVIVVY CCARGRTPPS	VALSNGLVLA LCRAVKYLQM SLPQLFIFAQ EIHASLVPGP QLWAAWDPEA LGPQDESCCT	Homo sapiens
339	5133	Peropsin	NM_006583	gaataagcct ataaatttag aacacaatat taatagtctt ttattaacct cctcagatct tgaatatattt acctgacct tgattctggg ctagttatgc gatcttttgt tgatgtttta gcactgagtc tcatgatctg cttttggtga aatcttctac caatgcttgc ccatggatgt acgctatcaa gatcaagtgc tgcttccgtt acttattgct	tcgataatta caacagttca tggtgcaact gggcattctc ggctgttact gtatggaagt ttttggaatg ctgccttct agcctggatc cccagatcct gtcttacacc ctgctattac cctcaacaga catgtttctg cccaaagaag attctataac catgttcaaa atctcaaaac aacactttag agacatggat tgtgcactct catctccttt	tgaagggtgt gactctaaaa tacttgatta attaagtaca gatatagggg tggaattttg gcaagcattg gacgtaggga aatggcctgt actggtgcta atgacagtta catgtcacgc gactggtcag gtggcatggg atctctccc ccctgcattt tgtcagactc ccattggctt ttttttgaca cattgtccta ggctgctgta gatgaattag	ttcggtatct atgaagatgc tggcagggtat aggaacttcg tcagtagcat gatacgagg gattactcac gaagaatgac tttgggcttt cgtgtaccat ttgcgataaa tatccattaa atcagataga cccttattc ccatggccat atgtggttgc accaaacat ctggaagaat atgcttttct tgagagtgt gtgtatgctt gcatcagagg ttaaggtccc	atgctaagaa tcacagactg ataagattat gacacccaca tggtctatccc ctgtcagggt ggtcgtggct caccaacact gatgcctatc aaaatggagg ttttattgtg acatcacact tgtaacaaaag catcgtgtgc ctatgggctt ctatggccca tttctggaggg gctgtgaca ctgaaataag tttaaatatg agctcctcaa gcacagctcg ctctgtgtcc tttcttctct	Homo sapiens

340	5133	Peropsin	NP_006574.1	ccctattatg gcatgcatta cactgtactg atgaccttta acttgccctg ctc	Homo sapiens
				MLRNNLGNSS DSKNEDGSVF SQTEHNIVAT YLIMAGMISI ISNIIVLGIF IKYKELRTPT P	
				NATIIINLAVT DIGVSSIGYP MSAASDLGYS WKFGVACQV YAGLNIFFGM ASIGLLTVVA	
				VDRYLITICLP DVGRMTWNT YIGLILGAWI NGLFWALMPI IGWASYAPDP TGATCTINWR	
				KNDRSFVSYT MTVIAINFIV PLTVMEFYCY HTILSIKHT TSDCTESLNR DWSDDQIDVTK	
				MSVIMICMFL VAWSPYSIVC LWASFGDPKK IPPPMALIAF LFAKSTTFYN PCIIYVANKK	
				FRAMLAMFK CQTHQTMPVT SILPMDVSN PLASGRI	
341	5519	Brain-Specific Angiogenesis Inhibitor 1	NM_001702	ggactttaga agccgttgct gccctctctg tcacctgaag cggggccctc tccatccca A	Homo sapiens
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342	5519	Brain-Specific Angiogenesis Inhibitor 1	NP_001693.1	<p> ccccctccc agcagccctt gccccaccg cccaatctgg agcggcacc cccagcctg  gggatcccg gggagcctgc cgcccatccg ggaccagca cggggcccaac caccaagaac  gagaatgtcg ccaccttgctc tgtagctcc ctgagcggc ggaagtgcgc gtatgcagaa  ctggactttg agaagatcat gcacaccccg aagcggcacc aagacatgtt ccaggacctg  aacgggaagc tgcagcacgc agcggagaag gacaaggagg tgctggggcc ggacagcaag  ccgaaaaagc agcagacgcc caacaagagg cctctggaga gcctccggaa agcccacggg  acgccacgt gggtagaagaa ggagctggag ccgctgcagc cgtcgccgt ggagcttcgc  agcgtggagt gggagaggtc gggcgccacg atcccgctgg tggccacga catcatcgac  ctccagaccg aggtctgagc gggtagggcg cgccacacg ctggggccacg gaggaggat  gctgctccgc ccgctcctgc cgacacggg cacagacacg ctgcgggca gcgggccagg  ccgcacccc ggctcaggg cgctcagac gggccaggc acaggcccc cagtgtggg  accagagcca gatgcaggac aggagggcg ccggccagc ggacagggc accagaggcc  gaagtgctt cagactccgc cctcctcgg cgagggcca gcgggcagat gggcggaagg  ctgtggaccg tggacaggcc cagcgcgcc agcgtcccg ggtacccgc tgaactcctg  ctgcggagga gctgctgct gggcccgcc ggcctggcac cgttttttaa acacccccat  ccctcgggaa gcagccagct cccacacct tccaggggcc tagggccctc ctagacccag  gtggagggca cagccctccg accctcatg ccccccaggg caggactgag tccctccag  gaagaagcag gggggaatct atttttctc tcttttctt tcttcaata aaaaagaatta  aaaaacccaaa aaaaa </p>	Homo sapiens
342	5519	Brain-Specific Angiogenesis Inhibitor 1	NP_001693.1	<p> MRQAAAPGP VNIAPLILL LLLGRRARA AAGADAGPG EPCATLVQK FFGYFAAAV P  FPANASRCSW TLRNEDPRRY TLYMKVAKAP VPCSGPGRVR TYQFDSFLES TRTYLGVESF  DEVLRLCDPS APLAFLQASK QFLQMRQQP PQHDGLRPRA GPPGPTDDFS VEYLVVGNRN  PSRAACQMLC RWLDACLAGS RSSHPCGIMQ TPCACLGGEA GPPAAGPLAP RGDDVCLRDV  AGPENCLTS LTQDRGGHGA TGGWKLWSLW GECTRDCGGG LQTRTRTCLP APGVEGGCE  GVLEEGRCQN REACGPAGRT SRSQSLRST DARRREELGD ELQQFGFPAP QTGDPAAEEW  SPWSVCSSTC GEGWQTRTF CVSSSYSTQC SGPLREQRLC NNSAVCPVHG AWDEWSPWSL  CSSTCGRGR DRTRTCRPPQ FGGNPCEGPE KQTKFCNLAL CPGRAVDGNW NEWSSWSACS  ASCSQGRQQR TRECNGPSYG GAECQHWVE TRDCFLOQCP VDGKQAWAS WGSCSVTCGA  GSQRRERVCS GPFFGGAACQ GPQDEYRQCG TQRCPEPHEI CDEDNFGAVI WKETPAGEVA  AVRCPRNATG LILRCCELDE EGIAYWEPPT YIRCVSIDYR NIQMTREHL AKQRLPGE  GVSEVIQTLV EISQDGTYS GDLLSTIDL NMTEIFRRA YSPTPGDVQ NFVQILSNLL  AEENRDKEE AQLAGPNAKE LERLVEFDV VIGFRMKDLR DAYQVTDNLV LSIHKLPSAG  ATDISFPMKG WRATGDWAKV PEDRVTVSKS VFSTGLTEAD EASVFVVGTV LYRNLGSFLA  LQNTTTLVNS KVISVTVKPP PRSLRTPLEI EFAHMYNGT NQTCILWDET DVPSSSAPPQ  LGPWSWRCR TVPLDALRTR CLCDRLSTFA ILAQLSADAN MEKATLPSVT LIVCGVSSL  TLMLLVIIY SWWYIRSER SVILINFCLS IISSNALILI GQTQTRNKVM CTLVAFLHF  FFLSFCWVL TEAWQSYMAV TGHRLNRLIR KRFLCLGWGL PALVVAISVG FTKAKGYSTM  NYCWLSLEGG LLYAFVGPAA AVVLVNMVIG ILVFNKLVSF DGITDKKIKE RAGASLWSSC  VVLPLLATW MSAVLAVTDR RSALFQILEA VFDSLEGFVI VMVHCILRRE VQDAVKCRV  DRQEEGNGDS GGSFQNGHAQ LMTDFEKDND LACRSVLNKD IAACTATIT GTLKRPSLPE  EEKLKLAAK GPPTNFNSLP ANVSKLHLHG SPRYGGPLP DFPNHSLLK RDKAPKSSFV </p>	Homo sapiens

343	5520	Brain-Specific Angiogenesis Inhibitor 2	NM_001703	<p>           GDGDIKFKILD SELSRAQEKALDTSYVILPTATATLRPKPK EEPKYSIHID QMPQTRLIHL            STAPEASLPA RSPPSRQPPSGPPEAPPAQ PPPPPPPPPP PQOPLPPPP NLEPAPPSLG            DPGEPAHPG PSTGPSTKNE NVATLSVSSL ERRKSYAEL DFEKIMHTRK RHQDMFQDLN            RKLQHAEEKD KEVLGPDSPK EKQOTPNKRP WESLRKAHGT PTWVKKELEP LQSPLELRS            VEWERSGATI PLVGQDIIDL QTEV         </p>	<p>           ggcgcgcggg agagcggag cctcggccct ccgcgcgggt gcagctacct accctgcgcc A            cgccaggtc cccgacttag gcatggcaaa cttgcgcccc gtggccgcc cgccagcgc            cgcccccgc tccgtctgt gacggcgccc aggaatacca cagcagtgat acatgtgacg            tccacactga cgtgccttc ctgtgggcat cgtgcaggtt gtgcgagtt cctggcacac            tggctgtaac tccgccccct tctctccctc tcaagaaagc aagattacgc ggtgacatgc            ctacacagctg atcacgacac acggggatgg agagcaagag ttatggagaa tacaggttgg            atgggcaagg gacataggat gacccagcc tgtccctct tactgtctgt gattctgtcc            ctgcgctgg ccacgcctt cgaccccgcc cccagtgcct gctctgcccc ggcctcgggt            gtgctctacg gggccttctc gctgcaggac ctcttctcta ccatgcctc gggctgctcc            tggacccctgg agaaccctga cccacccaag tactccctct acctgcctt caaccgccag            gagcaggtgt gcgcacactt tgccccccgc ctgctgcccc tggaccacta cctggtcaac            ttacactgcc tgcggcctag ccccgaggag gcggtggccc aggcggagtc agaggtgggg            cgccagaag aggagggagc agaggggca gcggggttgg agctgtgcag cggctcagcc            cctttacct tccgtacct cgacaagaac tccgtgcagc tgtgctgtc ggtcagcccc            tccgaggccc cgcgcctgtt ggcgcgcgtt ggcctagctt cccgttctgt cagagttctg            ctcatcaaca acaacaactc tagccaattc acctgtggtg tgctctgcc ctggagtgag            gagtgtggcc gcctgcgg gcggcgctc caccaccacc acatctccag gccctcctgc tgccacacc            ggagaggcg gcggcgctc cccgggtgccc cgggggccc cggccacctg ctgagccga ttgcaactg            ctgtccaatg cctgggtgccc cacaaccgag atgagatatg gtgagagacc ggaagaggaa            gggagcagca atgatctgtt ccaaccgag gccgaggtct gcagatgagc ctgggctata catggcgacg            ccgaaagtga aaaccagtg gcgaggttcc ccgtggagcg tgtgtccct gacgtgtggg            acaggcgacc cggcggtga aggtgcggac ccgtcctgt gtgtccctcc cctatgggac cctgtgcagc            cagggtctgc aggtgcggac gccctgcaac aattcagcca cctgcccagt gcacggcgtg            gggccctgc gggagaccag gacctgtgc tcccgagct gcgggcgggg gtcccggagc            tgggaggagt gggggtcctg gacctgtgc tcccgagct gcgggcgggg gtcccggagc            cggatgcgga cctgcgtgcc cccccagcac ggcggcaagg cctgcgaggg tccctgagctg            cagactaagc tctcagtat ggtgcctgc ccggtggaag gccagtgggt agaatgggggt            ccctggggcc catgtccac gtccgtgccc aatgggacc aacagcgag ccggaagtgc            agcgtggcg gcccagcctg ggccacatgc acgggtgccc tcactgacac ccgggagtgc            agcaacctcg agtgcgcggc cactgatagc aagtggggc catggaatgc gtggagcctg            tgccttaaga cgtgtgacac aggttgccag cgcgcttcc gcatgtgcca ggcacgggc            acgcagggtt accctgcga gggcacccga gaggaggtga agcctgttag tgagaagagg            tgtccagcct tccatgatat gtgcaggat gatactgta gctgatgac gtggaagaag            gcagctgctg gcgagatcat ctacaacaag tgccccccga atgcctcagg gtctgccagc            cgccgctgtc tccctagtc ccaaggcgtg gcgtactgg ggtgcccag cttgtctgc            tgcattctcc atgagtaccg ctacctgtat ctgtcactta gggagcacct ggccaaaggg         </p>	<p>           Homo sapiens         </p>
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344	5520	Brain-Specific Angiogenesis Inhibitor 2	NP_001694.1	<p>ccgccgacac ccagcgcccg ccaagtgtccc gagccagggg agcgagccg gaccatgcct</p> <p>cgcacctgc cggctctac catgaagatg ggctccctgg agcgaaagaa attacggtat</p> <p>tcagacctgg actttgaggt gatgcacacc cgaaacggc attcagaact ctaccacgag</p> <p>ctcaaccaga agttccacac ttctgaccgc taccgacgac agtccacggc caagagggag</p> <p>aagcgtgga gtgtgtctc ggggtgggag gccgagcgga gcgtgtgcac cgataagccc</p> <p>agccctgggg agcgcccaag ctgtgtccaa catcgcgcc atcagagctg gacacacttc</p> <p>aaatctatga cactggctc gctgcccc cagccccag aagcgctgac tctgacacgg</p> <p>gcagagcct gggagccac agaaccacg gatggtgact tccagacaga ggtgtgagt</p> <p>ccagctgga ctgcccactg catataaata tatatatctc tctattttca cactccactt</p> <p>tggaactacc caggagccag cgccctctcc cctctccga gggctgggca gggagcgcc</p> <p>gtggactcag ccaggtggg ggagccggac atggcttggc ctggggtccc agggccttc</p> <p>ctgtttctc agagccctc cagccactgg aacccatctc tcagcccgag ctgtccgtcc</p> <p>ctgtcccggg ctggggaggg gggaggggaa cttgtgtggg aataaacttc actctgtg</p> <p>VILSLRLATA FDPAPSACSA LASGVLYGAF SIQDLFPTIA SGCSWTLENP P</p> <p>FNREQVCAH FAPRLPLDH YLVNFTCLRP SPEEAVAQAE SEVGRPEEEE</p> <p>SGSGPFTFLH FDNFVQLCL SAEPSEAPRL LAPAALAFRF VEVLLINNN</p> <p>RWSEECGAA GRACGFAQPG CSCPGEAGAG TTTTSPGPP AAHTLSNALV</p> <p>DLHSGSSNDL FTTEMRYGEE PEEPKVKTQ WPSADEPGL YMAQTGDPAA</p> <p>LTCGGLQVR TRSCVSSPYG TLCSGPLRET PCNNSATCP VHGWEEWGS</p> <p>GSRSRMRTCV PPQHGKACE GPELOTKLCS MAACPVEGQW LEWGPWGPCS</p> <p>SRKCSVAGPA WATCTGALTD TRECSNLECP ATDSKWGPWN AWSLCSKTCD</p> <p>QATGTQGYPC EGTGEEVKPC SEKRCPAFHE MCRDEYVMLM TWKKAAGEI</p> <p>GSASRRCLLS AQGVAYWGLP SFARCSHEY RYLYLSLREH LAKQRMLAG</p> <p>QELLARTYY SGDLFSVDI LRNVDTFKR ATVPSADDV QRFQVVSFM</p> <p>DAQQVSPGSV HLLRWVEFI HLVGDAKAF QSSLIVTDNL VISIQREPVS</p> <p>RGRRGMDWV RHSEDRFLP KEVLSLSSPG KPATSGAAGS PGRGRPGTV</p> <p>LLPADPDESS YFVIGAVLYR TLGLILPPPR PELAVTSRVM TVTVRPPTQP</p> <p>SYIINGTDP HCASWDYSRA DASSGDWDE NCOTLETQAA HTRCQCQHL</p> <p>DLTELAGSP SVPLVIGCAV SCMLLTLLA IYAAFWRFIK SERSIILLNF</p> <p>ILVGQSRVLS KGVCTMTAAF LHFFFLSSFC WVLTEAWQSY LAVIGMRTR</p> <p>WGLPALVVAV SVGFTRTKGY GTSSYCWLSL EGGLLYAFVG PAAVIVLVNM</p> <p>MARDGISDKS KKQRAGSERC PWASLLPCPS: ACCGAVPSPLL SSASARNAMA</p> <p>LLALTWMSAV LAMTDRRSVL FQALFAVENS AQGFVITAVH CFLRREVQDV</p> <p>DESEDSPDSC KNGQLQILSD FEKDVLDACQ TVLFKEVNTC NPSTITGTL</p> <p>KSCLVGPEGS LSFSPLPNGI LVPMAASPLG GEPPPPQEAN PYMCGEGGL</p> <p>TEPGSEGDM VLPRTLSLQ PGGGGGGGED APRARPEGTP RRAAKTVAHT</p> <p>HSGLGLGPAY GSLQNPYGMT FQPPPTPSA QVPEPGEERS RTMPRTVPGS</p> <p>KLRYSDLDPE VMHTRKRHSE LYHELNQKHF TFDYRSQST AKREKRWSVS</p> <p>TDKPSPGERP SLSQHRHQHS WSTFKSMTLG SLPPKPRERL TLHRAAAWEP</p> <p>TEPPDGDFTQ EV</p>	Homo sapiens
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345	5521	Brain-Specific Angiogenesis Inhibitor 3	NM_001704	Homo sapiens
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346 5521 NP\_001695.1 Homo sapiens

Brain-Specific  
Angiogenesis  
Inhibitor 3

aagcacaatg tatatatatta tgcagttttt aaagtttata acagttctgtt tggccattac  
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347 6031 SIV/HIV Receptor  
BONZO NM\_006564

348.	6031	SIV/HIV Receptor BONZO	NP_006555.1	<p> aattcgcaca agctcatatg tggttaccat gacgaggcaa ttccactgt ggttcttgcc  accagatga cactggggtt cttcttgcca ctgctacca tgattgtctg ctattcagtc  ataatcaaaa cactgcttca tgctggaggc ttccagaagc acagatctct aaagatcatc  ttcctggtga tggctgtgtt cctgctgacc ctatgccatg accagcttcc actacaccat catggtgaca  cgcagcacac actgggaata ctatgccatg ggcctgctt aacctgtgc tctatgcctt tgcagcctg  gagggcatcg atacctgag gaaacttctg aaggacattg gttgcctccc ttaccttggg  agttttcgaa agaacttctg ttctgaggac aattccaaga ctttttctgc cttccacaat  gtctcacatc aatggaatc ccagcatgtt ccagttatag gcttggcag ggtttcgaga agtgcctcg  gtggaggcca ccagcatgtt gtcattgctg tgccctcttg atgtggtgag gcaggtcttg ttatagctt  gaatttgcaa gtcattgctg atggagaagt tatcagacac tctggctggt ttggaatgct tcttctcagg  gcgcatctc atggagaagt tactgttctc ttcttgaaca ctcatgctga aagcccaagt aggggtctc  catgaacatg tactgttctc tcttccatct cctccatctt ccaagaatgc tgaacccaag ggggatgaca  aaatttttaa ggacttctc atgactcag gttctccttg attgggactg gggctgaagg ttgaagaggt  tgtgactcct atgactcag acaaaagctg ttgatggtg atggcacact ggtgcccac gtcagaagg  gagcacggcc tactgggcaa cctcacagaa atgagatcag gctctgctc acctggggc ttgactttg  ctctctgac tactgggcaa cctcacagaa atgagatcag gctctgctc acctggggc ttgactttg  ccaccaggca tggtagatg gctttagata atccagaata actagcacca gggactatga  tataggtaga ctgaattata agaggctgat aattccagtg gtccatggaa tgcttgaaaa  atgggcaaaa cagcgtttaa gactgtaatg aatctaagca gcatttctga agtgactct  atgtgcaaaa cagcgtttaa gactgtaatg aatctaagca gcatttctga agtgactct  ttgtggctt tgcattttaa aaatgaaatt ttccaatgct tgcacacaa acgtatgtaa  atgtatatac ccacacat acacacat gtcataatg actagcatat gagttcata  gctaagaaat aaaactgtta aagtctcaa act </p>	Homo sapiens
349	6204	Lysophosphat idic Acid Receptor Edg4	NM_004720	<p> KLQSLTDVFL VNLPLADLVE VCTLPFWAYA GIHEWVFGQV MCKSLIGIYT INFYTSMLIL  TCITVDRFIV VKATKAYNQ QAKRMTWGV TSLLIIVISL LVSLPQIIYG NVFNLDKILIC  GYHDEAISTV VLATQMTLGF FLPLTMIVC YSVIIKTLH AGGFQKHRSI KIIFLVMVAF  LLTQMPFNLM KFIKSTHWEY YAMTSFHYTI MVTEAIAYL ACLNPVLYAF VSLKFRKNFW  KLVKDIGCLP YLGVSHQWKS SEDNSKTFSA SHNVEATSMF QL </p> <p> gcccagatgg tcatcatgg ccatgctac tacaacgaga ccactggctt cttctataac A  aacagtggca aagagctcag ctcccactgg cgcccacagg atgtggtcgt ggtggcactg  gggctgaccg tcagcgtgct ggtgctgctg accaatctgc tggatcatag agccatcgcc  tccaaaccgc gcttccacca gcccactac tacctgctcg gcaatctggc cgcgctgac  ctcttcgagg gcgtggccta ccttctctc atgttccaca ctggtccccg cacagcccga  ctttcacttg aggctggtt cctgcggcag ggttgcctg acacaagcct cactgcgtcg  gtggccacac tgctggccat cgccgtggag cgccaccgca gtgtgatggc cgtgcagctg  cacagccgcc tgccccgtgg ccgctggtc atgctcattg tggcgctgtg ggtggctgcc  ctgggctgg ggctgctgcc tgcccactcc tggcactgcc tctgtgccct ggaccgctgc  tcacgcatgg caccctgct cagccgctcc tattggcgg tctgggctct gtcgagcctg  cttgtcttcc tgctcatggt ggctgtgtac acccgattt tcttctacgt gcggcgcgga  gtgcagcgca tggcagagca tgtcagctgc caccgccgt accgagagac cacgctcagc </p>	Homo sapiens

Accession	Gene	Protein	Species
350	Lysophosphatidic Acid Receptor Edg4	NP_004711.2	Homo sapiens
6204			
351	C-C Chemokine Receptor 5	NM_000579	Homo sapiens
6213			

6213	C-C	NP_000570.1	352
	Chemokine		
	Receptor 5		
<p> aaaatatgtt gatgaaaaat agcaaccttt ttatctcccc ttcatctgca tcaagtttat  gacaaactct cctttcactc cgaaggttcc ttatgtatat ttaaaagaaa gcttcagaga  attgctgatt cttgagttta gtgatctgaa cagaaaatacc aaaattattt cagaaaatgta  caacttttta cctagtacaa ggcaacatat aggttgtaaa tgtgtttaa acaggtcttt  gtcttgctat ggggagaaaa gacatgaata tgattagtaa agaaatgaca cttttcatgt  gtgatttccc ctccaagta tggtaataa gtttactga cttagaacca ggcgagagac  ttgtggcctg ggaagctgg ggaagcttct taaatgaga ggaatttgag ttggtatcac  tattgctggc aaagacagaa gctcactgc aagcactgca tgggcaagct tggctgtaga  aggagacaga gctggttggg aagacatggg gaggaaggac aaggttagat catgaagaac  cttgacggca ttgctccgct taagtcatga gctgagcagg gagatcctgg ttggtgttgc  agaaggttta cctgtggcc aaaggaggggt caggaaggat gagcathtag ggcaaggaga  ccaccaacag cctcaggtc aggttgagga tggcctctgc taagctcaag gcgtgaggat  gggaaggagg gaggtattcg taaggatggg aaggagggag gtattcgtgc agcatatgag  gatgcagagt cagcagaact ggggtggatt tggtttgaa gtgaggggtca gagaggagtc  agagaatc ctagtcttc aagcagattg gagaaccct tgaagaaca tcaagcacag  aaggaggagg aggaggttta ggtcaagaag aagatggatt ggtgtaaaag gatgggtctg  gtttgcagag cttgaacaca gtctcaccga gactccaggc tgtcttccac tgaatgcttc  tgacttcata gatttccttc ccattccagc tgaatactgc aggggtctcc aggagagac  tagatttatg aatacacag gtatgaggtc taggaacata cttcagctca cacatgagat  ctagtgagg agcatttag cacatactac acattcaata agcatcaaac tcttagttac  caaccacagg cagcatttag gcaaaagcatt gagcaaaagg gtcccatata ggtgagggaa  tcattcaggg atagcactga gcaaaagcatt ggcctgccag tgacacaaag ttttctgca  gcctgaaaaa ctaagatgct gcctgccagg gacatattca ttgggaaata agctgccttg  tttaaccgtc aataggcaaa ggggggaagg gacatattca ttgggaaata agctgccttg  agccttaaaa ccccaaaaag tacaatttac cagcctccgt attcagact gaatgggggt  ggggggggcg ccttaggtac ttattccaga tgccttccc agacaaacca gaagcaacag  aaaaaatcgt cctccctcc ctttgaaatg aatatacccc agatgtttg ggtatatcca  tttcaaaagg agagagagag gtttttttct gttctttctc atatgtatgt gcacatactt  gagactgttt tgaatttggg ggatgggctaa aaccatcata gtacaggttaa ggtgagggaa  tagtaagtgg tgagaactac tcagggaatg aaggtgtcag aataataaga ggtgtactg  actttctcag cctctgaata tgaacgggtga gcattgtggc tgtcagcagg aagcaacgaa  gggaaatgct tttccttttg cctctaagtt gtggagagtg caacagtagc ataggacct  accctctggg ccaagtcaaa gacattctga catcttagta ttgtcatatt cttatgtatg  tgaaggttac aaatgcttg aagaaaaata tgcattcaat aaaaaacacc ttcta  MDQVSSPII DINYTSEP QKINVKQIAA RLLPLYSLV FTFGVGNML VILILNCKR  LKSMIDIYLL NLAISDLFFL LTVFFWAHYA AAQWDFGNTM COLLGLYFI GFFSGIFFII  LLTIDRYLAV VHAUFALKAR TVTFGVVTSV ITWVAVFAS LPGLIFTRSQ KEGLHYTCSS  HFPYQYQFW KNFQTLKIVI LGLVPLLVV VICYSGLIKT LLRCNEKKR HRAVRLIFTI  MIVYFLFWAP YNIVLLNTE QEFFGLNCS SSNRLDQAMQ VTEITGMTHC CINPIIYAFV  GEKFRNYLLV FFQKHIARKF CKCCSIFQOE APERASSVYT RSTGEQEISV GL </p>			

353	6363	Chemokine (C-C motif) Receptor- like 2 (CCRL2)	NM_003965	<p>tctgtctctg ggggaagtggg cacacgttaa aagaaatgtt tatttcagtc ttctgaaata A</p> <p>gggaattact ctggctaaaa ttagctctca gaagggaata gtgggctgt atgaatccag sapiens</p> <p>gtccagtttg ttgtttcttc caggataagg cagctgtcgg aggggaaaa catctcccat</p> <p>ttctccacag ggcagctctga agatggccaa ttacacgctg gcaccagagg atgaatatga</p> <p>tgtcctcata gaaggtgaac tggagagcga tggagcagag caatgtgaca agtatgacgc</p> <p>ccaggcaact tcaagccagc tgggtccatc actctgctct gctgtgttg tgatcggtgt</p> <p>cctggacaat ctctgggttg tgtttatctt ggttaaatat aaaggactca aacgcgtgga</p> <p>aaatatctat ctctctaaact tggcagtttc taacttgtgt ttcttgctta cctgcccc</p> <p>ctgggctcat gctggggggc atcccatgtg taaaattctc attggactgt acttcgtggg</p> <p>cctgtacagt gagacatttt tcaattgcct tctgactgtg caaaggatcc tagtgttttt</p> <p>gcacaaggc aacttttctt cagccaggag gaggtgtccc tgtggcatca ttacaagtgt</p> <p>cctggcatgg gtaacagcca ttctggccac ttgtcctgaa tacgtgtgtt ataaacctca</p> <p>gatggaagac cagaaataca agtgtgcatt tagcagaact ccttctctgc cagctgatga</p> <p>gacattctgg aagcattttc tgacttttaa aatgaacatt tcggttcttg tcttcccc</p> <p>atttattttt acatttctct atgtgcaaat gagaaaaaca ctaaggttca gggagcagag</p> <p>gtatagcctt tcaagccttg ttttgccat aatggtagtc ttcttctga tgtgggcgc</p> <p>ctacaattt gcatttttcc tgtccacttt caaagaacac ttctccctga gtgactgcaa</p> <p>gagcagctac aatctggaca aaagtgttca catcataaa ctcatcgcca ccaccactg</p> <p>ctgcataaac cctctcctgt atgctgttct ttagtggaac tttagcaaat acctctgccg</p> <p>ctgtttccat ctgcgtagta acacccact tcaaccagg ggcagctctg cacaaggcac</p> <p>atcgagggaa gaactgacc attccaccga agtgtaaact agcatccacc aaatgcaaga</p> <p>agaataaaca tggattttca tcttctgca ttatttcatt taaattttct acacattgt</p> <p>atacaaaatc ggatacagga agaaaagga gaggtgagct aacatttctt aagcactgaa</p> <p>tttgtctcag gcacgtgca aggtctttta caaacgtgag ctctctgcc tctaccact</p> <p>tgtccatagt gtgataagga ctagtctcat ttctctgaga agaaaactaa ggcgcggaaa</p> <p>tttgtctaag atcacataac taggaagtgg cagaactgat tctccagccc tggtagcatt</p> <p>tgtccagagc ctacgcttg tccagaacat caaactccaa accctgggga caaacgacat</p> <p>gaaataaatg tatttaaaa catct</p>	Homo sapiens
354	6363	Chemokine (C-C motif) Receptor- like 2 (CCRL2)	NP_003956.1	<p>LILVKYKGLK RVENIYLNL AVSNLCFLT LPFWAHAGD PMCKILIGLY FVGLYSETFF</p> <p>NCLLTVQRYL VFLHKGFFS ARRVPCGII TSVLAWVTAI LATLPEYVAVY KPQMEDQKYK</p> <p>CAFSRTPFLP ADETFWKHL TLMNISVLV LPLFIFFLY VQMRKTLRFR EQRYSLFKLV</p> <p>FAIMVFLIM WAPYNIAFFL STFKEHFSLS DCKSSYNLDK SVHITKLIAT THCCINPLLY</p> <p>AFLDGTFSKY LCRCFHLRSN TPLQPRGQSA QGTSREPDH STEV</p>	Homo sapiens
355	6446	Pael Receptor (GPR37)	NM_005302	<p>atgcgagccc cggcgcgctt tctgcgccg atgtcgcgcc tactgtctct gctactgtct A</p> <p>aaggtgtctg cctcttctgc cctcggggtc gcccttggt ccagaaacga aacttgtctg</p> <p>gggagagact gtgcacctac agtgatccag cgcgcggcca gggacgcctg gggaccggga</p> <p>aattctgcaa gagacgttct gcagccccga gcaccacagg aggagcaggg ggcagcgttt</p> <p>cttgcgggac cctcctggga cctgcggcg gccccgggc gtgacccggc tgcaggcaga</p> <p>ggggcgagg cgteggcagc cggacccccg ggacctccaa ccaggccacc tggccccctg</p> <p>aggtggaaag gtgctcgagg tcaggagcct tctgaaact tggggagagg gaacccccag</p>	Homo sapiens

356	6446	Pael Receptor (GPR37)	NP_005293.1	<p>gcccaccagc tcttcttca gatctcagag gaggaagaga aggggtccac aggcgtggc  atttcgggc gtagccagg gacagagtgtg aagacagtcc ccggagccag cgatctttt  tactggccaa ggagagccgg gaaactccag ggttccacc acaagccctt gtccaaagac  gccaatggac tggcggggca cgaagggttg acaattgcac tcccgggccc ggcgctggcc  cagaatggat ccttgggtga aggaatccat gagcctggg gtccccggc gggaacacg  acgaaccggc gtgtgagact gaagaacccc ttctaccgc tgaccaggga gtctatgga  gacctacggg tcatgtgtct gtcctgtgtg atcttcggga ccggcatcat tggcaacctg  gggtgatgt gcatgtgtg ccacaactac tacatcggga gcatctccaa ctccctcttg  gccaacctgg ccttctggga ctttctcatc atcttctctt gccttcgctt ggtcatcttc  cacgagctga ccaagaagtg gctgctggag gacttctctt gcaagatcgt gccctatata  gaggtcgctt ctctgggagt caccaccttc acctatgtg ctctgtgcat agaccgcttc  cgtgctgcca ccaacgtaca gatgtactac gaaatgatc gaaactgttc ctcaacaa  gccaaacttg ctgttatatg ggtgggagct ctattgttag cacttccaga agttgttctc  cgccagctga gaaaggagga ttgggggttt agtggccgag ctccggcaga aagtgcat  attaagatct ctctgattt accagacacc atctatgtt tagccctcac ctacgacagt  gcgagactgt ggtggtattt tggctgttac tttgttttc ccacgtttt caccatcac  tgctctctag tgactcggag gaaaatccg aagcagaga aagcctgtac ccgagggaat  aaacggcaga ttcaactaga gactcagatg aactgtacag tagtggcact gaccatttta  tatggatttt gcattattcc tgaaaaatc tgaaacattg ttactgccta catggtaca  gggttttcac agcagacaat ggacctctt aatatactca gccagttcct tttgttctt  aagtcctgtg tcaccccgat cctcctttt tgctctgca aaccttcag tcgggcttc  atggagtgt gctgctgtg ctgtgaggaa tgcattcaga agtcttcaac ggtgaccagt  gatgacaatg acaacgagta caccacggaa ctgcaactc cgccttcag taccatacg  cgtgaaatgt ccacttttc tctgtcggg actcattgct ga  NSARDVLRAR APREEQGA F LAGPSWDLP AGRDPAAGR APASRNCTCL GESCAPTVIQ RGRDAGPG P Homo  RWKGARGQEP SETLGRNPT ALQLFLQISE EEKGRGAG ISGRSQSV KTVPGASDLF sapiens  YWPFRAGKLO GSHKPLSKT ANGLAGHEGW TIALPGRALA QNGSLGEGIH EPGPRRGNS  TNRRVRLKNP FYPLTQESYG AYAVMCLSVV IFGTGIIIGNL AVNCIVCHNY YMRISISNLL  ANLAFWDFLI IFFCLPLVIF HELTKKWLLE DFCKIVPYI EVASLGVTTF TLCALCIDRF  RAATNVQMYI EMIEHCSTT AKLAVIIVGA LLLALPEVVL RQLSKEDLGF SGRAPAERCI  IKISPDLPDT IYVLALTYDS ARLWVYFGY FCLPTLFTIT CSLVTARKIR KAEKACTRGN  KRQIQLSQM NCTVVALTIL YGFCIIIPENI CNIVTAYMAT GVSQTMDDL NIISQFLFFF  KSCVTPVLLF CLCKPFSRAF MECCCCCEE CIQKSTVTS DDNDNEYTTE LELSPFSTIR  REMSTFASVG THC</p>	
357	6536	Putative Neurotransmi tter Receptor (PNR)	NM_003967	<p>atgagagctg tcttcatcca aggtgctgaa gagcacccctg cggcattctg ctaccaggtg A  aatgggtctt gcccaggag agtacatact ctgggcatcc agtggatcat ctacctgacc  tgtgcagcag gcatgctgat tatcgtgcta gggaatgtat ttgtggcatt tgctgtgtcc  tacttcaaag cgcttcacac gccaccaaac ttctctgctg tctcctggc cctggctgac  atgtttctgg gctgctggt gctgcccctc agcaccattc gctcagtgga gagctgctgg  ttcttcgggg acttctctg cgcctgcac acctacccctg acacctctt ctgcctcacc</p>	Homo sapiens



358	6536	Putative Neurotransmitter Receptor (PNR)	NP_003958.1	<p> MRAVFIIQAE EHPAFCYQV FLLSLALAD MELGLLVLP L STIRSVESCW FFGDFLCRLH TYLDTLFLCLT  YFKALHTPTN DRHCAICDPL LYPKFTVRV ALRYILAGWG VPAAYTSLFL YTDVVETRLR  QWLEEMPCVG SCQLLNKFW GWLNFPLEFV YLLCWLPTI DTWVDSLHF ITPPLVDFIF IWFAYFNSAC  AGAAKHERKA AKTLGIWGI WFRKALKLTL SQKVFSPQTR TVDLQYE </p>	Homo sapiens
359	6777	G Protein-Coupled Receptor TM7SF1	NM_003272	<p> cgcgcgatg cgcgagagacc ccgcggggg cgcgggggc cgtgagcccc gatgagggcc A  gagcgcccc ggcgcggcg ggcgcggccc ggcgcggcg agacccccg gtgggaccca  gcccgaacg actcgctgc gcccacgctg acccggcgcc tgcggcgctt cgtgaagctt  ggcctcacg tgcctacac cgtgtctac gcgctgctc cgtgttcat ctacgtgcag  ctcggctgg tgcgcggtta ccgccacaag cggctcagct accagagcgt ctctctctt  ctcgccctc tctgggccc cctgcggacc gtcctctct cctctactt caaagactc  gtggcgcca attcgctcag ccccttcgtc tctggctgc tctactgctt cctgtgtgc  ctgcagttt tcacctcac gctgatgaac ttgtacttca cgcaggtgat ttcaaaagcc  aagtaaaat attctccaga attactcaa taccgggtgc cctctacct ggcctccctc  ttcatcagcc ttgttttctt gttgtgaat ttaacctgtg ctgtgctggt aaagacggga  aattgggaga ggaagggtat cgtctctgtg cgagtgggca ttaatgacac gctctcgtg  ctgtgtgccg tctctctc catctgtctc taaaaatct ctgaagtgc cttagccaac  attacttgg agtccaaagg ctcctccgtg tgtcaagtga ctgccatcg tgtaccctg  atactgctt acactctcg ggcctgctac accctgttca tctgtcatt ttctcagaac  aagagcgtcc attccttga ttatgactgg tacaatgtat cagaccaggc agatttgaag  aatcagctgg gagatgctgg atactatta ttggagtggt tgtatttgt ttggaaactc  ttacctacca ccttagtctg ttattcttc cgagttagaa atctacaaa ggaccttacc  aacctggaa tggccccag ccatggattc agtccagat ctatttctt tgacaacct  cgaagatatg acagtatga tgacctgccc tggaacattg cccctcaggg acttcaggga  ggttttgctc cagattacta tgattgggga caaaaaacta acagcttctt ggcacaagca  ggaactttgc aagactcaac ttggatcct gaaaaaccaa gcttggtgta gcatcagta  acagttttat ggacgattcc tcagatgaaa agcttcagaa aagcatagt acagctgaat  tttagggca ctttctcta agaaatagaa attgatttt attgttaca ggtttccaat  ggcccatag gaataagcaa taatgtagac tgataaaccc ttatttagt actaaagag </p>	Homo sapiens

[illegible]

363	6921	G Protein- Coupled Receptor GPR39	NM_001508	QVMRGIMPLA FCVHPLLYMA AVPSLGCCCR HCPGYRDSWN PEDAKSTGQA LPINATAAPK PSEPQSRELS Q	atggcttcac ccagcctccc gggcagtgac tgctcccaaa tcattgatca cagtcattgc A cccgaagtttg aggtggccac ctggatcaaa atcacccctta ttctggtgta cctgatcatc ttcgtgatgg gcttcttggg gaacagcgcc accattcggg tcacccagggt gctgcagaag aaaggatact tgcagaaggga ggtgacagac cacatggtga gtttggttg ctcggacatc ttggtgttcc tcactggcat gcccatggag tttacagca tcatctggaa tccccgacc acgtccagct acaccctgtc ctgcaagctg cacactttcc tcttcgaggc ctgcagctac gctacgctgc tgcacgtgct gacactcagc tttagcgct acatcgccat ctgtcacccc ttcaggtaca aggtgtgtc gggaccttg cagtggaagc tgctgattgg ctctgctgg gtcacctccg cctgtgtggc actgcccctg ctgtttgcca tgggtactga gtacccccg gtgaacgtgc ccagccaccg ggtctcact tgcacccgt ccagcacccg ccaccacgag cagcccagga cctccaatat gtccatctgt accaactct ccagccgctg gaccgtgtc cagtcacagca tcttcggcgc ctctgtgtc tacctcgtg tctgtctc ctgagccttc atgtgctgga acatgatgca ggtgctcatg aaaagccaga agggctcgt ggcgggggc acgggctc cgcagctgag gaagtcgag agcgaagaga gcaggaccgc caggaggcag accatcatct tctgaggct gattgtgtg acattggcg tatgtggat gcccaaccag attcggagga tcatggctgc ggccaaacc aagcagact ggaagaggtc ctacttcgg gcgtacatga tctcctccc ctctcggag acgttttct acctcagctc ggtcatcaac ccgtcctgt acacgtgtc ctgcagcagc ttctcgggg tgtcgtgca ggtcgtgtc tgccgctgt cgtgcagca cgccaaacc gagaaagcgc tgccgtaca tgcgactcc accacgaca gcgccgctt tgtcagcgc cgtgtcctc tgcgtcccc gcgccagtcc tctgcaagga gaactgagaa gattttctta agcactttc agagcgagg cgagccccag tctaaagtc agtcattgag tctcagatca ctagagccca actcaggcgc gaaaccagcc aattcgtcgt cagagaatgg ttttcaggag catgaagttt ga MASPSLPGSD CSQIIDHSHV PEFEVATWIK ITLILVYLII FVMGLLGNSA TIRVTQVLQK P KGYLQKEVTD HMVSLACSDI LVFLIGPME FYSIIWNPLT TSSYTLCKL HTFLFEACSY ATLLHVLTL FERYIAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHE QPETSNMISC TNLSSRWTFV QSSIFGAFV YLWVLLSVAF MCWNMMQVLM KSQKSLAGG TRPPQLRKSE SEESRTARRQ TIFLRLIV TLAVCWMPNQ IRIMAAAKP KHDWTRSYFR AYMILLPFSE TFFYLSVIN PLYTVSSQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSARFVQR PLLFASRRQS SARTEKIFL STFQSEAEPO SKSQSLSLES LEPNSGAKPA NSAAENGFOE HEV	Homo sapiens
364	6921	G Protein- Coupled Receptor GPR39	NP_001499.1	atggcttcac ccagcctccc gggcagtgac tgctcccaaa tcattgatca cagtcattgc A cccgaagtttg aggtggccac ctggatcaaa atcacccctta ttctggtgta cctgatcatc ttcgtgatgg gcttcttggg gaacagcgcc accattcggg tcacccagggt gctgcagaag aaaggatact tgcagaaggga ggtgacagac cacatggtga gtttggttg ctcggacatc ttggtgttcc tcactggcat gcccatggag tttacagca tcatctggaa tccccgacc acgtccagct acaccctgtc ctgcaagctg cacactttcc tcttcgaggc ctgcagctac gctacgctgc tgcacgtgct gacactcagc tttagcgct acatcgccat ctgtcacccc ttcaggtaca aggtgtgtc gggaccttg cagtggaagc tgctgattgg ctctgctgg gtcacctccg cctgtgtggc actgcccctg ctgtttgcca tgggtactga gtacccccg gtgaacgtgc ccagccaccg ggtctcact tgcacccgt ccagcacccg ccaccacgag cagcccagga cctccaatat gtccatctgt accaactct ccagccgctg gaccgtgtc cagtcacagca tcttcggcgc ctctgtgtc tacctcgtg tctgtctc ctgagccttc atgtgctgga acatgatgca ggtgctcatg aaaagccaga agggctcgt ggcgggggc acgggctc cgcagctgag gaagtcgag agcgaagaga gcaggaccgc caggaggcag accatcatct tctgaggct gattgtgtg acattggcg tatgtggat gcccaaccag attcggagga tcatggctgc ggccaaacc aagcagact ggaagaggtc ctacttcgg gcgtacatga tctcctccc ctctcggag acgttttct acctcagctc ggtcatcaac ccgtcctgt acacgtgtc ctgcagcagc ttctcgggg tgtcgtgca ggtcgtgtc tgccgctgt cgtgcagca cgccaaacc gagaaagcgc tgccgtaca tgcgactcc accacgaca gcgccgctt tgtcagcgc cgtgtcctc tgcgtcccc gcgccagtcc tctgcaagga gaactgagaa gattttctta agcactttc agagcgagg cgagccccag tctaaagtc agtcattgag tctcagatca ctagagccca actcaggcgc gaaaccagcc aattcgtcgt cagagaatgg ttttcaggag catgaagttt ga MASPSLPGSD CSQIIDHSHV PEFEVATWIK ITLILVYLII FVMGLLGNSA TIRVTQVLQK P KGYLQKEVTD HMVSLACSDI LVFLIGPME FYSIIWNPLT TSSYTLCKL HTFLFEACSY ATLLHVLTL FERYIAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHE QPETSNMISC TNLSSRWTFV QSSIFGAFV YLWVLLSVAF MCWNMMQVLM KSQKSLAGG TRPPQLRKSE SEESRTARRQ TIFLRLIV TLAVCWMPNQ IRIMAAAKP KHDWTRSYFR AYMILLPFSE TFFYLSVIN PLYTVSSQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSARFVQR PLLFASRRQS SARTEKIFL STFQSEAEPO SKSQSLSLES LEPNSGAKPA NSAAENGFOE HEV	Homo sapiens	
365	7221	Galanin Receptor GalR2	NM_003857	ggacaggtgc ccgggagct tcccgcctgc gaagaccag acggctgcag gagccgggc A agcctcgggg tcagcggcac catgaagctc tcggctgcc caggggccgg gaacgcgagc caggcgggcg gcgggggagg ctggcacccc gagcggtca tcgtgcccc gctcttcgcg ctcatcttcc tctgtggcac cgtgggcaac acgctggtc tggcggtgct gctgcgcgcg ggccaggcgg tcagcactac caacctgtc atccttaac tgggcgtggc cgacctgtgt ttcatcctgt gctgcgtgcc ctccaggcc accatctaca cctggacgg ctgggtgttc ggctcgtgc tgtgcaaggc ggtgcacttc ctcatcttc tcaccatgca cgcagcagc ttcacgctgg ccgcgtctc cctggacagg tatctggcca tccgctacc cgtgcactcc	Homo sapiens	

366	7221	Galanin Receptor GalR2	NP_003848.1	<p> cgcgagctgc gcaagcctcg aaacgcgctg gacgcatcg ggtcatctg gggctgtctg  ctgtcttct cggggcccta cctgagctac taccgcagt cgcagctggc caacctgacc  gtgtgccatc cgcgtggag cgcctctgc cgcgcgcca tggacatctg cactctctg  ttcagctacc tcttctctgt gctggtctc ggcctgacct acgcgcgac cttgcgctac  ctctggcgcg cgtcgaccc cgtggccgcg ggtcggtg ggcgcgcgc caagcgcaag  gtgacagca tgatctctat cgtggccgcg ctctctgccc tctgtggtat gcccaccac  gcgtcatcc tctgctgtg gttcgccag ttcctgctca cgcgcgccc ttatgcgctt  cgatctctc cgcacctggt ctctacgccc aactctgctg tcaaccccat cgtttacgcg  ctggtctcca agcacttccg caaaggcttc cgcacgacct gcgcggccct cgtggccctg  gcccaggcc gagctcggg ccgtgtgtgc gctgcgcgc gggcaccca cagtggcagc  gtgtggagc gcagctccag cgacctgtg cacatgagc aggcggcggg ggcctctctg  ccctgcccc gcgttccca gccatgcac ctgagacct gtcctggccc gtcctggcag  ggcccaagg cagcgacag cactctgac gttgatgtg cctgaagaca cttagcgggc  gcgtgggat gtacagagt tggagtcatt gttgggggac cgtgggccc  </p>	Homo sapiens
367	7246	Orexin Receptor 1	NM_001525	<p> cctcccttca ggaagtttga ggctgagacc cgaagagacc tgggtgcaag cctccaggca  ccctgaagg agtggctga gggctggccc aagctccctc ctctccctct gtagagccta  ggatgcccct ctgtgcagc ggctctctgag ctcatggagc cctcagccac cccaggggcc  cagatggggg tccccctgg cagcagagag cgtccccctg tgcctccaga ctatgaagat  gagtttctcc gctatctgtg gcgtgattat ctgtacccaa aacagtatga gtgggtcctc  atcgacgct atgtgctgt gttcgtctg gccctgggtg gcaacacgct ggtcgtgctg  gccgtgtgc ggaaccacca catgaggaca gtcaccaact acttcattgt caacctgtcc  ctggctgacg tctgtgtgac tgctatctgc ctgcccggca gctgctggtt ggacatcact  gagtcctggc tgttcggcca tgcctctgc aggtcatcc cctatctaca ggtgtgtctc  gtgtcagtgg cagtgttaac tctcagcttc atgcctctg accgttggtg tgcctctgc  caccactat tgttcaagag cacagccccg cggccccctg gctccatcct ggcctctg  gctgtgtcgc tggccatcat ggtgccccag gctgcagtea tggaaatgag cagtgtgctg  cctgagctag ccaaccgac acggctcttc tcagtctgtg atgaacgctg ggcagatgac  ctctatccca agatctacca cagtgtcttc tttattgta cctacctggc cccactgggc  ctcatggcca tggcctatctt ccagatatct cgaagctctt gggggcgcca gatccccggc  accacctcag cactgtgtgc gaactggaag cgcctctcag accagctggg gacctggag  caggccctga gtggagagcc ccagccccgg ggcgcgcctt tcttggtga agtgaagcag  atcggtgcac ggaggaagac agccaagatg ctgatggtg tgctgctggt ctccgccc  tgctacctgc ccatcagcgt cctcaatgtc cttaagaggg tgttcgggat gtcccgccaa  gccagtacc gcgaagctgt ctacgcctgc ttcacctctt cccactggtt ggtgtacgac </p>	Homo sapiens

368	7246	Orexin Receptor 1	NP_001516.1	MEPSATPGAQ MGVPVPSREP SPVPPDYDE FLRLWRDYL YPKQYEWVLI AAYVAVFVA P LVGNTLVCLIA VMRNHMRV TNYFIVNLSL ADVLVTACL PASLLVDITE SWLFQHALCK VIPYLQAVSV SVAVLTLSEI ALDRWYAICH PLLEFKSTARR ARGSIILGIWA VSLAIMVPOA AWMECSSVLP ELANRTRLFS VCDERWADDL YPKIYHSCFF IVTYLAPLGL MAMAYFQIFR KLWGRQIPGT TSALVRNWK R PSDQLGDLEQ GLSGEPQPRG RAFLAEVKQM RARRKTKML MVLLVLFALC YLPISVLNL KRVFGMFRQA SDREAVYACF TFSHWLVYAN SAANPIIYNF LSGKFREQFK AAFSCCLPGL GPCGSLKAPS PRSSASHKSL SLQSRCSISK ISEHVVLTSV TTVLP	Homo sapiens
369	7247	Orexin Receptor 2	NM_001526	gggggggggg taattgagct tcagctgagc cggacgtagc tttctcctcc tgggtgtcatt A gtctgagcct ccagtgccgg gtccctagtt cctcagctgc ctatcttccc ggtgcaacat cgctgtataa gacagcaag ccaccgcaga agttgcccg cagaagactc cggaggcatt ggctcagtaa ctttccagc cattttctgc tcgggagccc ctctagcct ctccgcgcag cctttccac cgaaatcac cagtgtctcat ggggcaggcg gagaggagct tgcagcattg agcggaaccg gacttgacc cgtgatgtcc ggcaccaaat tggaggactc cccccctgt cgaaactggt catctgcttc ggagctgaat gaaactcaag agccctttt aaacccacc gactatgacg acgaggaatt cctgcgttac atcgtgttcg tcgtggctct cattgggaac tatgagtggt tcctgacgc cgggtacatc atcgtgttcg tcgtggctct cattgggaac gtcctgggtt gtgtggcagt gtggaagaac caccacatga ggacgggtaac caactacttc atagtcaatc tttctctggc tgatgtgctc gtgaccatca cctgcttcc agccacactg gtcgtggata tcaactgagc ctggtttttt ggacagtccc ttgcaaaagt gattccttat ctacagaccg tgcgtgtgtc tgcgtgtgtc ctacacactga gctgtatcgc ctggatcgg tggatgcaa tctgtcacc tttgatgttt aagagcacag caaagcgggc ccgtaacagc attgtcatca tctggattgt ctctgcatt ataagtatt ctcaggccat cgtcatggag tgcagcaccg tgttccacag cttagccaat aaacacccc tcttacgggt gtgtgatgag cgctgggggt gtgaaattta tcccaagatg taccacatct gtttcttctt ggtgacatac atggcaccac tgtgtctcat ggtgttggt tatctgcaa ttttcgcaa actctggtgt cgacagatcc ctggaacatc atctgtagt cagagaaaat ggaagccct gcagcctgtt tcacagctc gagggccag acagccaaacg aagtcgccga tgagcgtgtt ggcggctgaa ataaagcaga tccgagccag aaggaaaaca gcccgatgt tgatgggtgt gcttttggt tttgcaattt gctatctacc aattagcatc ctcaatgtgc taaagagagt atttgggagt tttgcccata ctgaagacag agagactgtg tatgctggt ttaccttttc acactggctt gtatatgcca atagtctgc gaatccaatt atttataatt ttctcagtg aaaaattcga gaggaattta aagctgcgt tctctgtgt tgccttgag ttaccatcg ccaggaggat cggctcacca ggggacgaac tagcacagag agccggaagt ccttgaccac tcaatcagc	Homo sapiens

370	7247	Orexin Receptor 2	NP_001517.1	<p>aactttgata acatatcaaa actttctgag caagttgtgc tcaatagcat aagcacactc  ccagcagcca atggagcagg accattcaa aactggtaga atattattc atatgacaag  gatacctgag taaaactatc ctttttaaaa tcaactggaa cagaaatttt attatcctat  gatgtgaagc taaaattact tgtggatctt tttttttttt aatctattgc tctttggaaa  taaaaaaaa gtcagtttaa aatgaaaaaa aaaaaaaa aaa</p> <p>MSGTKLEDSP PCRNWSSASE LNETQEPFLN PTDYDDEEFL RYLWREYLHP KEYEWVLIAG P  YIIVFWALI GNVLCVAVW KNHMRVTN YFIVNLISLAD VLVTITCLPA TLVVDITETW  FFGQSLCKVI PYLQTVSVSV SVLTLSLAL DRWYAICHLF MKFSTAKRAR NSIVIIWIVS  CIIMIPQAIV MECSTVFPGL ANKTLFTVC DRWGEIYIP KMYHICFFLV TYMAPICLMV  LAYLQIFRKL WCRQIPGTSS VVQRKWKPLQ PVSQPRGPQ PTKSRMSAVA AEIKQIRARR  KTARMIMWVL LVFAICYLPI SILNVLKRVF GMFAHTEDRE TVYAWFTFSH WLVIYANSAAN  PIIYNFLSGK FREEFKAAFS CCLGVHHRQ EDRLTRGRS TESRKSLLTQ ISNFDNISKL  SEQVLTSS TLPAANGAGP LQNW</p>	Homo sapiens
371	8436	Platelet- Activating Factor Receptor	NM_000952	<p>ccagctgata ttccagccca cagcaatgga gccacatgac tcttccaca tggactctga A  gttccgatac actctcttc cgattgttta cagcatcacc tttgtgctcg ggttcattgc  taatggctac gtgctgtggg tctttgcccg cctgtaccct tgcaagaaat tcaatgagat  aaagatcttc atggtgaacc tcaccatggc ggacatgctc tcttgatca ccttgccact  ttggattgtc tactaccaa accagggcaa ctggatactc cccaaattcc tgtgcaacgt  ggctggctgc cttttcttca tcaaacacta ctgtctctgt gcttctctgg gcgtcatcac  ttataaccgc ttccaggcag taactcgcc catcaagact gcctcagcca acaccgcgaa  gcgtggcatc tctttgtcct tggatcatcg ggtggccatt gtgggagctg catcctactt  cctcatcctg gactctacca acacagtgc cgacagtgtc ggctcaggca acgtcactcg  ctgctttgag cattaacaga agggcagcgt gccagtcctc atcatccaca tcttcatcgt  gttcagcttc tctctggtct tctcatcat cctctctgc aacctggta tcatccgtac  cttgctcatg cagccggtgc agcagcagcg caacgctgaa gtcaagcgcc gggcgctgtg  gatgggtgac acggtcttgg cgggtgttcat catctgcttc gtgccccacc acgtgggtga  gctgccctgg acccttgctg agctgggctt ccaggacagc aaattccacc aggccattaa  tgatgcacat caggtcaccc tctgctcct tagcaccaac tgtgtcttag accctgttat  ctactgttc ctacaccaaga agttccgcaa ggatacggc gaaagtctt acagcatgcg  cagtagcccg aaatgctccc ggccaccac ggatacggc actgaagtgg ttgtgccatt  caaccagatc cctggcaatt cctcaaaaa ttagtctctg cttc</p> <p>MADMLFLITL PLWIVYYQNG GNMILPKFLC NVAGCLFFIN TYCSVAFLGV ITYNRFQAVT P  RPIKTAQANT RKRGISLSLV IWVAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHEYKGG  SVPVLIHIF IVFSFFLVFL IILFCNLVII RTLLMQPVQQ QRNAEVKRRRA LWMVCTVLAV  FIICFVPHV VQLPWTIAEL GFQDSKFHQA INDAHQVTLIC LLSTNCVLDL VIYCFLTKKF  RKHLTEKFYS MRSSRKCSRA TTDITVEVVV PFNIQPGNSL KN</p>	Homo sapiens
372	8436	Platelet- Activating Factor Receptor	NP_000943.1	<p>MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGYVLWVF ARLYPCKKFN EIKIFMNLTP P  MADMLFLITL PLWIVYYQNG GNMILPKFLC NVAGCLFFIN TYCSVAFLGV ITYNRFQAVT P  RPIKTAQANT RKRGISLSLV IWVAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHEYKGG  SVPVLIHIF IVFSFFLVFL IILFCNLVII RTLLMQPVQQ QRNAEVKRRRA LWMVCTVLAV  FIICFVPHV VQLPWTIAEL GFQDSKFHQA INDAHQVTLIC LLSTNCVLDL VIYCFLTKKF  RKHLTEKFYS MRSSRKCSRA TTDITVEVVV PFNIQPGNSL KN</p>	Homo sapiens
373	8509	G Protein- Coupled Receptor Ls8509	NM_007223	<p>tgggggctgc ctctctctgc ccgcccgcg tgtcaagctg tgttctagcg gccagggac A  cgaggggggc taagaaaggg ggcgccacg catgcagagg caaaaggcg ctgcggaaag  gggtccccgt cgccagtgtc gaggcaggag gtcggagcca caagtgggg gctgggaagc  aggaccacgc acgggctgtc tggcaggcgg ccgggagcag ggcaggctg ctgggggacgc</p>	Homo sapiens

tcagggtctt ccaccaagc catggcgct gtcgggcact cgggggtccc ctctggctc  
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agtgtcctt ttattgagg agtatatga tccatctcag tgatccatgt ccttagtgaa  
gtccacatta ttctctgtg ggacaagagc tgggcagtt tgaatgggtc ttgaggtggg

374	8509	G Protein- Coupled Receptor Ls8509	NP_009154.1	<p> taccatgt gcactttctg aggatgcctc acttccctgg gctctgcaga gaacacacag  agagaagact ttacagagctc acagagagcag ggagcaggag cactctaagg gaattc  MVLWSTCRIT NASEPHNAG AEAAGVNRSA LGFGEAQLY RQFTTVQV IFIGSLGNF P  KFLHKVFCVS TILSFPAIAL DRYYSVLYPL ERKISDAKSR ELVMYIWAHA VVASVPVFAV  TNVADIYATS TCTEVWSNSL GHLVYVLVYN ITTVIVPVV VFLELILIRR ALSASQKKV  IIAALRTPQN TISIPYASQR EAEHLATLLS MMVFILSV PYATLVVYQT VLNVPDTSVF  LLLTAVWLPK VSLLANPVLF LTWNKSVRKC LIGTLVQLHH RYRRNVVST GSGMAEASLE  PSIRSGSOLL EMFHIGQQOI FKPTDEDEES EAKYIGSADF QAKEIFSTCL EGEQGPQFAP  SAPPLSTVDS VSQVAPAPV EPETFPDKYS LQFGFGPFEL PPQWLSETRN SKRLLPPLG  NTPEELIQTK VPKVGRVERK MSRNKNVSIF PKVDS </p>	Homo sapiens
375	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NM_006173	<p> ttgataggga tagaacaca ttggctgct tctatagtta acaagatgct gtacattcc A  ttgcctcact agctctgaag actatactag cgggacaaag aaagcacctg agatgagctg  agaggagggt aaaggtacac agagatcccc tggatatattg ttctatgtcc tctcaggggc  tttgctacca ctagagaatt atccatatta agaacttgca ttgatattct gggttctgtt  tcatttttta gggctcaag agcagctca agtcattcac atgttccat caaatacaga  cacagatcag ggaagattaa accctactaa ttctctgctg gatgcctcac aacaaggtgc  cttccaagaa ctaatggcca aaatatccac ccacaacaca aataagctta gaaaatctct  tcttacaatc ctgacacaat ggaagtcttc ttgaaccacc cagcatctaa tacaaccagc  acaaagaaca acaactcggc atttttttac tttagtctct gtcaacctcc tctccagct  ttactcctat tatgcatagc ctatactgtg gtcttaattg tgggctttt tggaaacctc  tctctcatca tcatcatctt taagaagcag agaaaagctc agaatttcac cagcatactg  attgccaatc tctccctctc tgataccttg gtgtgtgta tgtgcatcca ttttactatc  atctacactc tgatggacca ctggatatctt ggggatacca tgtgcagact cacatcctat  gtgcagagtg tctcaatctc tgtgtccata ttctcacttg tattcactgc tgtcgaaaga  tatcagctaa ttgtgaacc cctgggcttg aagcccagtg tgactcatgc ctactggggc  atcacactga ttgtgctgtt ttccctctctg ctgtctattc ccttcttctt gtctaccac  ctcactgatg agcccttcag caacctctct ctcccactg acctctacac ccaccagggtg  gcctgtgtgg agaactggcc ctccaaaag gaccggctgc tcttcaccac ctccctttt  ctgtgtcagt atttgttcc tctaggcttc atcctcatct gctacttgaa gattgttat  tgctccgca ggagaaatgc aaaggtagat aagaagaagg aaatgaggg ccggctcaat  gagaacaaga ggatcaacac aatgttgatt tccatcgtgg tgacctttgg agcctgctgg  ctgccccgaa tatcttcaat gtcacttttg actggtatca tgagggtgctg atgagctgcc  accacgacct ggtatttga gtttgccact tgggtgctat ggtttccaca tgtataaacc  ctctctttta tggctttctc acaaaaaat tccaaaagga cctggtagtg cttattcacc  actgctgggtg ctccacact caggaaagat gtgaaaaat tgccatctcc actatgcaca  cagactccaa gaggtcttta agattggctc gtataacaac aggtatatga aaattgataa  tgctgaagct ctctctgaat gggagctgga caggtaattg tgggaatagg gcaagatgca  gaaagaagaa accagaacca aaaaatagca ctttatcccc acttttctt taggctaaga  ctgcctgtct catatgtcta tccaacacac cctccaaacat acacgaacac acataccacc  ccttttctct taagaaaata actctaataa ttcaaacac ctgccccgca tcatgtgtg </p>	Homo sapiens



376	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NP_006164.1	caagaatga gaatgagaaa gcagagagag aggcacacag cagtgatggc tggggaacaa tgttcacaga tacttttatt caatggaata tctacaaaag ttatgactaa tgatatgcct agtaaaaaa ctgctatacc tcttagcac tgagaat fkqkrkaqnf tsilianlsl sdtlvcmci hftiiytimd hwifgdmcrl tsyvsqsvsi svsifslvft averyqlivn prgwkpsvth aywgitiwl fslslsipff lsyhltdepf rnslsptdly thqvacvsnw pskkdrllft tsflflqyfv plgfilicyl kiviclrrrn akvdkkkene grlnenkrin tmlisivtf gacwlpriiss msltgimrc cattcccacc ctctctctt taataagcag gacgaaaaa gacaaattcc aaagaggatt gttcagttca agggaaatgaa gaattcgaa taatttttgt aaatggattc caatatcggg aataagaata agctgaacag ttgacctgct ttgaagaac atactgtcca ttgtctctaaa ataatctata acaaccaaac caatcaaat gaattcaaca ttattttccc aggttgaaaa tcattcagtc cactctaatt tctcagagaa gaatgcccag ctcttggtt ttgaaaatga tgattgtcat ctgcccctgg ccattgatatt taccttagct ctgtgttatg gagctgtgat cattcttggt gtctctggaa acctggcctt gatcataatc atcttgaaac aaaaggagat gagaaatgtt accaacatcc tgattgtgaa cctttccttc tcagacttgc ttgttgccat catgtgtctc cctttacat ttgtctacac attaatggac cactgggtct ttgttgaggc gatgtgtaag ttgaatcctt ttgtgcaatg tgtttcaatc actgtgtcca tttctctct ggttctcatt gctgtggaac gacatcagct gataatgaac cctcgaggggt ggagacacaaa taatagacat gcttatgtg gtattgtgtg taattgggtc ctgtgtgtgg ctctctcttt gcctttcctg atctaccaag taatgactga tgagccgttc caaaatgtaa cacttgatgc gtacaaaagac aaatacgtgt gctttgatca atttccatcg gactctcata ggtgtgtcta taccactctc ctcttggtgc tgcagtattt tggctccact tgtttatat ttatttgcta cttcaagata tatatacgc taaaaggag aacaaacatg atggacaaga tgagagacaa taagtacagg tccagtgaat ccaaaagaat caatatcatg ctgctctcca ttgtggtagc atttgcatgc tgcgtgctcc ctcttaccat ctttaacact gtgtttgatt ggaatcatca gatcattgct acctgcaac acaatctgtt attcctgctc tgccacctca cagcaatgat atccactgt gtcaacccca tattttatgg gtctctgaac aaaaacttcc agagagactt gcagttcttc ttcaactttt gtgatttccg gtctcgggat gatgattatg aaacaatagc catgtccacg atgcacacag atgtttccaa aacttcttg aagcaagcaa gccagtcgc atttaaaaa atcaacaaa atgatgataa tgaaaaaatc tgaaactact tatagcctat ggtcccgat gacatctgt taaaaacaag cacaacctgc aacatacttt gattacctgt tctcccaagg aatggggttg aaatcatttg aaatgacta agattttctt gctttgcttt ttactgcttt tgtgttagt gtcataatta catttggaac aaaaggtgtg ggctttgggg tcttctggaa atagtgttga ccagacatct ttgaagtgtc tttgtgaat ttatgcata aatataaaga cttttact gtacttattg gaatgaaatt tcttaaaagt attacgatgc gctgacttca gaagtacctg ccattccaata cggtcattag attgggtcat cttgattaga ttagattaga ttagattgtc aacagattgg gccatcctta ctttatgata ggcattcattt tagtgtgtta caatagtaac agtatgcaaa agcagcattc aggagccgaa agatagctct gaagtcattc agaagtgtt tgagggttct gtttttgtt ggttttgtt tgtttttt tttttcacc ttaaggagg ctttcattc ctcctgactc atgtcactt aaatcaaaat	Homo sapiens
377	9421	Neuropeptide Y Receptor Type 1	nm_000909	caagaatga gaatgagaaa gcagagagag aggcacacag cagtgatggc tggggaacaa tgttcacaga tacttttatt caatggaata tctacaaaag ttatgactaa tgatatgcct agtaaaaaa ctgctatacc tcttagcac tgagaat fkqkrkaqnf tsilianlsl sdtlvcmci hftiiytimd hwifgdmcrl tsyvsqsvsi svsifslvft averyqlivn prgwkpsvth aywgitiwl fslslsipff lsyhltdepf rnslsptdly thqvacvsnw pskkdrllft tsflflqyfv plgfilicyl kiviclrrrn akvdkkkene grlnenkrin tmlisivtf gacwlpriiss msltgimrc cattcccacc ctctctctt taataagcag gacgaaaaa gacaaattcc aaagaggatt gttcagttca agggaaatgaa gaattcgaa taatttttgt aaatggattc caatatcggg aataagaata agctgaacag ttgacctgct ttgaagaac atactgtcca ttgtctctaaa ataatctata acaaccaaac caatcaaat gaattcaaca ttattttccc aggttgaaaa tcattcagtc cactctaatt tctcagagaa gaatgcccag ctcttggtt ttgaaaatga tgattgtcat ctgcccctgg ccattgatatt taccttagct ctgtgttatg gagctgtgat cattcttggt gtctctggaa acctggcctt gatcataatc atcttgaaac aaaaggagat gagaaatgtt accaacatcc tgattgtgaa cctttccttc tcagacttgc ttgttgccat catgtgtctc cctttacat ttgtctacac attaatggac cactgggtct ttgttgaggc gatgtgtaag ttgaatcctt ttgtgcaatg tgtttcaatc actgtgtcca tttctctct ggttctcatt gctgtggaac gacatcagct gataatgaac cctcgaggggt ggagacacaaa taatagacat gcttatgtg gtattgtgtg taattgggtc ctgtgtgtgg ctctctcttt gcctttcctg atctaccaag taatgactga tgagccgttc caaaatgtaa cacttgatgc gtacaaaagac aaatacgtgt gctttgatca atttccatcg gactctcata ggtgtgtcta taccactctc ctcttggtgc tgcagtattt tggctccact tgtttatat ttatttgcta cttcaagata tatatacgc taaaaggag aacaaacatg atggacaaga tgagagacaa taagtacagg tccagtgaat ccaaaagaat caatatcatg ctgctctcca ttgtggtagc atttgcatgc tgcgtgctcc ctcttaccat ctttaacact gtgtttgatt ggaatcatca gatcattgct acctgcaac acaatctgtt attcctgctc tgccacctca cagcaatgat atccactgt gtcaacccca tattttatgg gtctctgaac aaaaacttcc agagagactt gcagttcttc ttcaactttt gtgatttccg gtctcgggat gatgattatg aaacaatagc catgtccacg atgcacacag atgtttccaa aacttcttg aagcaagcaa gccagtcgc atttaaaaa atcaacaaa atgatgataa tgaaaaaatc tgaaactact tatagcctat ggtcccgat gacatctgt taaaaacaag cacaacctgc aacatacttt gattacctgt tctcccaagg aatggggttg aaatcatttg aaatgacta agattttctt gctttgcttt ttactgcttt tgtgttagt gtcataatta catttggaac aaaaggtgtg ggctttgggg tcttctggaa atagtgttga ccagacatct ttgaagtgtc tttgtgaat ttatgcata aatataaaga cttttact gtacttattg gaatgaaatt tcttaaaagt attacgatgc gctgacttca gaagtacctg ccattccaata cggtcattag attgggtcat cttgattaga ttagattaga ttagattgtc aacagattgg gccatcctta ctttatgata ggcattcattt tagtgtgtta caatagtaac agtatgcaaa agcagcattc aggagccgaa agatagctct gaagtcattc agaagtgtt tgagggttct gtttttgtt ggttttgtt tgtttttt tttttcacc ttaaggagg ctttcattc ctcctgactc atgtcactt aaatcaaaat	Homo sapiens

Accession	Gene	Protein	Species
378	9421	Neuropeptide Y Receptor Type 1	Homo sapiens
379	9834	Corticotropin releasing factor Receptor 1	Homo sapiens



382	10457	Frizzled-2	NP_001457.1	<p>MRPRSALPRL LLPILLPAA GPAQFHGKQ ISIPDHGFCQ PISIPLCIDI ANQOTIMPNL P</p> <p>LGHTNQEDAG LEVHQFYPIV KVQCSPELRF FLCSMYAPVC TVLEQAIPPC RSICERARQG</p> <p>CEALMNKFGF QWPERLRCEH FPRHGAEQIC VGQNHSEDA PALITATPPP GLQPGAGGTP</p> <p>GGPGGGGAPP RYATLEHPEH CPRVLKVPY LSKYFLGERD CAAPCEPARP DGSMTFSQEE</p> <p>TRFARLMILT WSVLCCASTF FTVTYLVDM QFRYPERPI IFLSGCYTMV SVAYIAGFVL</p> <p>QERVVCNERF SEDGYRTVVQ GTKKEGCTIL FMILYFFESMA SIWVWVLSL TWFLAAGMKW</p> <p>GHEAIEANSQ YFHLAAMAVP AVKITITILAM QOIDGDLISG VCFVGLNSLD PLRGFVLAPL</p> <p>FVYLFIGTSF LLAGFVSLFR IRTIMKHDGT KTEKLERLMV RIGVFSVLYT VPATIVIACY</p> <p>FYEQAFAREHW ERSWVSQHCK SLAIPCPAHY TPRMSPDFTV YMIKYIMTLI VGITSGFWIW</p> <p>SGKTLHSWRK FYRLTNSRH GETTV</p>	Homo sapiens
383	11968	Putative Leukocyte Platelet-Activating Factor Receptor (HUMNPIIY20)	NM_022571	<p>atggccttac tgggcagcca gcactccggc gccccctccg cggccggggc acctggcggg A</p> <p>acttctctcag cggccacggc ggccgtgctc tcttcagca ccgtggcgac cgcggcgctg</p> <p>gggaacctga gcagacgaag cggagggcgc acagctgccg ctcccggtgg cggcggcctt</p> <p>ggcgggtccg gggcagcgcg ggagggggg gcggcggtga ggcggcgct aggcccgag</p> <p>gcggcgccgc tgcgtgcga cggagctgca gtggcgggc aggcgctcgt cctcctgctc</p> <p>atcttctcgc tgcctagcct tggcaactgc gcgtgatgg ggggtgattgt gaagcaccgg</p> <p>cagctccgca ccgtaccaca cgccttcac ctgtcgtctg ccttatcgga tctgctcacg</p> <p>gcgtgctct gcctgcgcgc cgccttctct gaccttctca ctccggcccg ggggttcggcg</p> <p>cctgcgctgc ccggggggc ctggcgggc ttctgcggc caagcgctt ctccagctcg</p> <p>tgcttcggca tctgtacgc tcagcgtggc gctcatctcg ttggaccgtt actgcgctat</p> <p>cgctggccgc cgcgggagaa gatcgccgc gcggcggcg tgcagctgct ggcggcgcc</p> <p>tggctgacgg cctggggtt ctcttgccc tgggagctgc tggggcgcc cggggaactc</p> <p>gcggcgggcc agagcttcca cggctgcctc taccggacct cccgggacct cgcgcagctg</p> <p>ggcgggccct tcagcgtggg gctggtggg gctgctacc tgcgtgccct cctgctcacc</p> <p>tgcttctgcc actaccacat ctgcaagacg gtgcgctgt cggacgtgcg cgtgcggccg</p> <p>gtgaacacct acgcgcgcgt gctgcgttct tcagcgaggt gcgcacggc accaccgtcc</p> <p>tcattcatga</p>	Homo sapiens
384	11968	Putative Leukocyte Platelet-Activating Factor Receptor (HUMNPIIY20)	NP_072093.1	<p>MALLGSQHSQ APSAAGPPGG TSSAATAAVAL SFSTVATAAL GNLSDASGGG TAAAPGGGL P</p> <p>GGSGAAREAG AAVRRPLGPE AAPLLSHGAA VAAQALVLL IFLSLGNC AVMGVIVKHR</p> <p>QURTVTNAFI LSLSLDLIT ALLCLPAFL DLFTPPGSA PALPAGPWRG FCRPSRFFSS</p> <p>CFGIVYAQRG AHLVGPLLY RPPREKIGR RRALQLLAGA WLTAIGFSLP WELLGAPREL</p> <p>AAGQSFHGCL YRTSPDPAQL GGFPSVGLWV ACYLLPFLI CFCHYHICKT VRLSDVRVRP</p> <p>VNTYARVLRS SARCARPPPS SS</p>	Homo sapiens
385	14198	Interleukin-8 Receptor B	nm_001557	<p>cattcagaga cagaaggtgg atagacaaaat ctccaccttc agactggtag gctcctccag A</p> <p>aagccatcag acaggaagat gtgaaaatcc ccagcactca tcccagaatc actaagtggc</p> <p>acctgtcctg ggccaaagtc ccaggacaga cctcattgtt cctctgtggg aatacctccc</p> <p>caggagggca tctctggattt ccccttgca acccaggta gaagtctcat cgtcaaggtt</p> <p>gtttcatctt tttttctctg tctaacagct ctgactacca cccaaccttg aggcacagt</p> <p>aagacatcgg tggccactcc aataacagca ggtcacagct gctcttctgg aggtgtccta</p> <p>caggtgaaaa gccacgcgac ccaagtccagga ttttaagtta cctcaaaaat ggaagatttt</p>	Homo sapiens

aacatggaga gtgacagctt tgaagatttc tggaagggtg aagatcttag taattacagt  
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gaaatcaaca agtatcttgt ggtcattatc tatgccttg tattcctgct gacctgctg  
gaaactccc tcgtgatgct ggtcatctta tacagcaggg tcggccgctc cgtcactgat  
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gccgctcca agtggaatgg ctggattttt ggcacattcc cctgcatcag tgtgacctc  
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aggacctct actcatccaa tgttagccca gccgtctatg aggacatggg caacaataca  
gcaactggc ggatgctgtt acggatcctg cccagctctt ttgcttcat cgtgccactg  
ctgacatgc tgtctgcta cggattcacc ctgctacgc tgttaaggc ccacatggg  
cagaagcacc gggccatgcg ggtcatcttt gctgtcgtcc tcatcttct gctctgctg  
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acctgtgagc gcccaatca catcgaccg gctctggatg ccaccgagat tctgggcac  
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ctcctcaaga ttctagctat acatggcttg atcagaagg actccctgcc caaagacagc  
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cctaagtga gccctggggg ttctccctt ctcttcacag tcacattcca agcctcatgt  
ccactggttc ttcttggctc cagtgtcaat gcagccccc gcagctgtcac aggaagtga  
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attaaaccaa ggctagaacc acctgcctat atttttgtt aaatgatttc attcaatc  
tttttttaa taaaccattt ttacttgggt gttat

[illegible]

388	14641	Calcitonin Receptor	NP_001733.1	<p>aaacattaca tgctcagctt ggttttggac aagcctgttc attgggcagg acctagctgt  tgtaagaat tggctttaat gttgaatgta ttttgggtgc tgatgtttat aaactgagag  gtcacaaaaga atctatcact aaaaattttt acaaaaactgc caaaaatata attcttagtg  gaagacaata ctccctttta agagagtgtt ccaactccct aaactccagg atttataaag  caaattactc caaggtttat aaagcagatt acctcttgc cttgggtgct atctagcagt  aaaagataaa tttgttgaat attggtaat taaaagagc aaagactcc acataagtc attaactgct  ttccaccag ctcaaaagct taaaagagc tcaggctttt ccaggaagat ccaggagggc  taattagaaa tcaacttggt gttgaccgct tgtttctgtg tattaccaaa caggagggga  aaaaattaac tgcctccaaat ttaaccataa atcaattcat gtttaacgtt tctcattaaa  atccagtatt atattatcat atctctctt acttccagt aaagatttt tgaataatcct  gaataaacca gtatcggtac tggcacctga aattaatttg tgaatttgca acagtaatca  gagttaccat tatttaattt gtatgctaaa tgaggaggta cattgaaacc ctccaaatct  ccagctctcat ctatgtcata ttttgcact gcccttcaga agtgatttag ttgtggaaag  ataataaatt gatttggtat ggttacatat tttagccacc cagagaaaaa taattatatt  tctacagaga aaatgaattt gggatactaa agtagtttaa gtctccttta ctgaatgtaa  gggggggac gaaaagaagg tatttttcca atcacagtg tatgtagat tgttctattt  ttgtttacaa acatggaaaa cagagtattt ctggcagctg tggtaacaa gtgataatat  attgctaaaa tatttagat gtattatgc taatatagta ggggttgaa aaaaacaaa  agcttattat agaattgcac atagtctgc ccaaatgatg tgaatgctt atgcttgtgt  atatgtataa attaatacag agtacgttaa aagcaaaaaa atgtatatatt gcatattttt  ctaaagaaat atattattca tcttttcatt c</p>	Homo sapiens
389	16041	C-C Chemokine Receptor 6	NM_004367	<p>YVVRGKKKMD AQYKCYDRMQ P  DFDPSEKVTK YCDEKGVWFK  FTLVISLGIF VFFRSLGCQR  ILHFFHQYMM ACNYFWMLE  RAVYFNDNCW LSVETHLLYI  AVKATMILVP LLGIQFVVF  TVKRQWQAFK IQWNQRWGR  EIIPLNIEQ ESSA</p>	Homo sapiens

tcattccggc tccgatccag aacactaccg cgcacgaaaa tcactctgct tgttgtgtgg  
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390	16041	C-C Chemokine Receptor 6	NP_004358.1	<p>           aaaaaatgtg ttttgtacat gaagtaggaa tctattttca gcttcaaggt tcaattgag            ggcccaactg tttggagagg atggtattca ggttttttca tgtctttcaa atctgttagc            gtttgactct agaaatcaaa gcaaggaggt ggttaccag acattcttt tgggtgtgac            aatgcgctga tgtgatctat gaagatgatt catgttgaa aactagcaca gaaacatctt            gcttatttgc caaagctggg agatgagctt ctctgataa tttaaatgtt cagataaatg            aagctgactt atttaagcaa taacttttta aacattttag taagatgta taaaaatgtt            tccaaaatat accacatact ttattttctt ttaattttag tacattaggt tacatcatct            ttcttgctgt ctgtgggcatc aaaaagggtg ccatggtaac ctgacactct caggagacat            taagatagaa ggggctgttc ttacgtggtt cccattgatt ctcccatat cttttgtctc            tcaggctctg gccgtctctt cctgagcctt aactgtgt            MSGESMNFSD VFDSSEDFV SVNTSYYSVD SEMLLCSIQE VRQFSRLFVP IAYSLLICVFG P            LLGNILVVIT FAFYKKARSM TDVYLLNMAI ADILFVLTLP FWAVSHATGA WVFNSATCKL            LKGIYAINFN CGMLLTCTIS MDRYIAIVQA TKSFRLRSRT LPRTKIICLV VWGLSVIIS            STFVFNQKYN TQSDVCEPK YQTVSEPIRW KLLMLGLELL FGFFIPLMFM IFCYTFIVKT            LVQAQNSKRH KAIRVIAW LVFLACQIPH NMVLIVTAAN LGKMNRSQCS EKLIGYTKTV            TEVLAFLLHC LNPVLYAFIG QKFRNYFLKI LKDLWCVRRK YKSSGFSCAG RYSENISRQT            SETADNDNAS SFTM         </p>	Homo sapiens
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[illegible]

393	17250	G Protein- Coupled Receptor GPR45	NM_007227	AGDSCRQGAW TLVSNPFCPE PSPQDPFLP SAPAPVAWAH GRRQGLGPIH SRTNLMDETEL MDADSDF	atggcctgca acagcacgtc ccttgaggct tacacatacc tgctgctgaa caccagcaac A gcctcagact cggggtccac ccagttgccc gcaccctca ggatctcctt ggccatagtg atgctgctga tgacctgggt ggggttcctg ggcaacactg tggctgcat catcgtgtac cagaggccgg ctatgcgtc gccatcaac ctgctgctg ccacctggc cttctccgac atcatgtgt cctctgctg catgccctc accgcgtca cctcatcac cgtgcgctgg cactttgggg accacttctg ccgcctctca gccacgtct cttggtttt tgtcctggag ggcgtggcca tctgtctcat catcagcgtg gaccgttcc tcatcatcgt ccagcgccag gacaagctga acccgccag ggccaagggt atcatcggg tctcctgggt gctgtcctc tgcatcgcgg ggcctcgct cagggcgtg acgtggtgg aggtgccgg gcgggcccc cagtgcgtc tgggtacac gagctccc gctgacggc catacgtgt cacttgggtg gtggcctgt tcttcgccc ctttggcgtc atgtgtgctg cctacatgtg cactctcaac acggtccgca agaaccgct gcgctgac aaccagtcg acagcctgga cctgcggcag ctcaccagg cgggcctgct gcgcctgag cggcagcaac aggtcagcgt ggacttgagc ttcaagacca aggccttcc caccatcctg atcctcttcg tgggcttctc cctctgctgg ctgccccact ccgtctacag cctcctgctc gtgtttagcc agcgtttta ctgcggttcc tccttctacg ccaccagcac ctgcgtcctg tggttcagtt acctcaagtc cgtcttcaac cccatcgtct actcgtggag aatcaaaaaa ttcgcgagg cctgcataga gttcgtgccc cagaccttc aaatcctcc caaagtgcct gagcgatcc gaaggagaat ccagccaagc acagtatacg tgtgaatga aaacagctc gcggttag MACNSTSLEA YTYLLNTSN ASDSGSTQLP APLRISLAI V MLMLTVVGFL GNTVVCIIIV P QRPAMRSAIN LLATLAFSD IMLSCLMPF TAVTLITVRW HFGDHFCLRS ATLYWFFVLE GVAILLIISV DRFLIIVQRQ DKLNPRAKV IIAVSWLSF CIAGPSLTGW TLVEVPARAP QCVLGYTELP ADRAVVTIV VAVFFAPFGV MLCAYMCIIN TVRKNVVRVH NQSDSLDLRQ LTRAGLRLQ RQOQVSDLS FKTKAFTTIL ILFVGFSLCW LPHSVYSLLS VFSQRFYCGS SFYATSTCVL WFSYLKSVFN PIVYCWRIKK FREACIELLP QTFQILPKVP ERIRRIQPS TVYVCNENQS AV	Homo sapiens
394	17250	G Protein- Coupled Receptor GPR45	NP_009158.1	ggctcttatga gctgctattg aacacggcag agcctgttgg tgacctgcac acaggagccc A tccagtcagt actgattgaa ttactcaagg ctgcctctct gcaaatgtga gcactacagg acgtcgggac tgggcatttc cttccaacat ggcggccact gcctctccgc agccactcgc cactgaggat gccgattctg agaatagcag cttctattac tatgactacc tggatgaagt ggccttcag ctctgcagga aggatgcagt ggtgtcctt ggcaaatct tctctccagt ctctatagc ctgatttttg tgttggcct cagcgggaac ctccttcttc tcatggtctt gtcccgttac gtgcctcgca ggcggatggt tgagatctat ctgctgaatc tggccatctc caaccttctg tttctggtga cactgccctt ctggggcatc tccgtggcct ggcatgggtg cttcgggagt ttcttgtgca agatggtgag cactctttat actattaact ttacagtggt catcttttc attagctgca tgagcctgga caagtacctg gagatcgttc atgtcagcc ctaccacagg ctgaggacc cggccaagag cctgtcctt gctaccatag tatgggctgt gtccctggcc gtctccatcc ctgatatggt ctttgtacag acacatgaaa atcccaagg tgtgtggaac tgccacgcag atttcggcgg gcattggacc atttgaagc tcttctctccg	Homo sapiens	
395	17345	G Protein- Coupled Receptor D6	NM_001296			Homo sapiens

396	17345	G Protein- Coupled Receptor D6	NP_001287.2	MAATASPQPL LSGNLLLMV STLYTINFYS VFVQTHENPK RPAGQGRALK AFLHCCFSPI GMNDLGERQS	aaactctctag tgtgtcttgg ttgggtggtg ctgttggtgacc caggttaacag tccagtccacc ctggcacctg gcccgaagagg aacaaggagg agatgggaac ATEDADSENS LLRYVPRRRM GIFFISCMSL GVWNCHADFG IAAALVVAFF LYAFSSHRFR ENYPNKEDVG	ggtttctctt tgaggtgag ctttcttctg tgcaagtatt agagcatcgc gcttcgcga gcaactgcca aatgactgg aatgactgg agatgggaac cagctcaatt SFYYDYLDE VEIYLNLAI DKYLEIVHAQ GHGTIWKFL VWFPPYNLTL QYLKAFLAHV NKSA	ggtttctctt tgaggtgag ctttcttctg tgcaagtatt agagcatcgc gcttcgcga gcaactgcca aatgactgg aatgactgg agatgggaac cagctcaatt SFYYDYLDE VEIYLNLAI DKYLEIVHAQ GHGTIWKFL VWFPPYNLTL QYLKAFLAHV NKSA	gcatgatct gccccaggc gctatggttc cggaactgt cttccttcac gtttcttgg gtttcttgg gcttcctgaag gcttcctgaag catgaatgac taaatcagcc tgagtaccca ggtgtctccac tcaagtgtc VFYSLIFVLG VWFGKVFELP FWGISVAWHW SLLIATIVWA LPLIAMIFFY FGNCEVSQHL FLHTLLDLQV LQWHLAPGTA QASLSSCSES	VFYSLIFVLG VWFGKVFELP FWGISVAWHW SLLIATIVWA LPLIAMIFFY FGNCEVSQHL FLHTLLDLQV LQWHLAPGTA QASLSSCSES	Homo sapiens
397	17535	Gaba (b) Receptor 1	NM_001470	cgctcccgcc gggaagcgag aggaagcgga ggcctggggc ctgctgctgt cccaacgcca taccggggcc attgagtatg gccaacggct tcttatttga gacggagccc agcatctgta ccacactcag ccagggggccc aggacatcc ggccaagcca atgcctggct attgtgcttt ttcttccgaa aagtggggct ctggacgacc ttcttctcag gtgggacttt ctctttggga	tccctggct agagagcggt gggtgaggaa cttgaggccc tactggcgcc cctcagaagg tgactcgga tgtgcccggg cctggacaga ccctggaaaa gggtgattt gtcaggggcca aacggcgccg aggcctgcca tgccggacta ccaagtacct gcagctctgt cctatgggtc cgacacctc ggaagaagat tggaggaaacg atccagctgt tctatgagac agaagtacgt	gctcccgcc agagacctg gggtgaggaa gggagagacc actctctc ttgccagatc ccaggtgaag ggagcgcgag tatggacaca tggaagggtt ccggtgtgac gtggagcacc agtgtacatc gcccgcggtg tgagctcaag atatgagctg ctccacgctg cagctcacca agccacactc tgctaccatc agtgaaggag gcccgtcaaa tgaagcccg ctgggttccctc	gctcccgcc agagacctg gggtgaggaa gggagagacc actctctc ttgccagatc ccaggtgaag ggagcgcgag tatggacaca tggaagggtt ccggtgtgac gtggagcacc agtgtacatc gcccgcggtg tgagctcaag atatgagctg ctccacgctg cagctcacca agccacactc tgctaccatc agtgaaggag gcccgtcaaa tgaagcccg ctgggttccctc	tggtgttgg agcctggatt ggagcgggga gagcgcgccg gctgggagccg ctgggaaagg tctgggaaagg tctggcaggt ccaaggtccc gtgtccgaat gtggggacct atctgggtggg actgcccagg ttcccattgag tggaagacctg acgacagcaa gtgtgatcca accctatcaa gtgtaggat accggcagcg gttcccact cccgcgtgaa actctttgaa ctgaggtctt cacttcgact agattacttt gccaggatgc ccgaatcacc gtgaggtgta caaggagcgt atgctgacaa ttggttcaag	tggtgttgg agcctggatt ggagcgggga gagcgcgccg gctgggagccg ctgggaaagg tctgggaaagg tctggcaggt ccaaggtccc gtgtccgaat gtggggacct atctgggtggg actgcccagg ttcccattgag tggaagacctg acgacagcaa gtgtgatcca accctatcaa gtgtaggat accggcagcg gttcccact cccgcgtgaa actctttgaa ctgaggtctt cacttcgact agattacttt gccaggatgc ccgaatcacc gtgaggtgta caaggagcgt atgctgacaa ttggttcaag	Homo sapiens

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398	17535	Gaba(b) Receptor 1	NP_001461.1	MLLLILLAPL FLRPPGAGGA QTPNATSEGC QIIHPPWEGG IRYRGLTRDQ VKAINFLPVD P YEIEYVCRGE REWGPVKVRK CLANGSWTDM: DTPSRCVRIC SKSYLTLENG KVFLTGGDLP ALDGARVDFR CDPDFHLVGS SRSICSQGW STPKPHCQVN RTPHSERRAV YIGALFPMSG GWPGGACQP AVEMALEDVN SRRDILPDYE LKLIHDSKC DPGQATKYLY ELLYNDPIKI IIMPCCSSVS TLVAEARMW NLIVLSYSS SPALSNRQRF PTFERTHPSA TLHNPTRVKL FERWGWKKIA TIQTTTEVFT STLDDLEERV KEAGIEITER QSFSDPAVP VKNLKRQDAR IIVGLFYETE ARKVCFEVYK ERLFGKKYVW FLIGWYADNW FKIDPSINC TVDEMTAEVE GHITTEIVML NPANTRISIN MTSQEFVEKL TKRLKRHPEE TGGFQEAPLA YDAIWALALA LNKTSGGGR SGVRLEDENY NNQITTDIY RAMNVSSTFEG VSGHVFDAS GSRMAWTLIE QLQGSYKKI GYDSTKDDL SWSKTDKWIW GSPPADQSL IKTFRFLSQK LFISVSVLSS LGIVLAVVCL SFNIYNHVR YIQNSQPNLN NLTAVGCSLA LAAVFPLGLD GYHIGRNQFP FVCQARLWLL GLGFSLGYS MFTKIWWVHT VFTKKEEKE WRKTLPEWKL YATVGLLVGM DVLTLAIWQI VDPLHRTIET FAKEEPKEDI DVSILPQLEH CSSRKMNTWL GIFYGYKGLL LLLGIFLAYE TKSVSTEKIN DHRVAGMAIY NVAVLCILITA PVTMILSSQQ DAAFAFASLA IVFSSYITLV VLFVPKMRRL ITRGEWQSEA QDTMKTGSST NNNEEKSRLL LEKENRELEK IIAEKEERVS ELRHQLQSRQ QLRSRRHPTT PPEPSGGLPR GPPEPPDRLS CDGSRVHLLY K	Homo sapiens
399	17666	Glucagon- Like Peptide 1 Receptor	NM_002062	gaattccggg tttgtgcac cactctggaa ccgctcgtgt gtggcctgtc ggaatgacat A cgccctcatc agtctccgca cgcgttccc aggtggcagc gatggcccag tctgaactc cccgccatgg ccggcgcgcc ccggcccgctg cgccttgccg tgcctgtgtc cgggatggtg ggcagggcgg gcccccgcgc ccagggtgcc actgtgtccc tctgggagac ggtgcagaaa tggcgagaat accgacgcca gtgccagcgc tccctgactg aggatccacc tctgccaca gacttgttct gcaaccggac ctccgatgaa tagcctgtct gccagatgg ggagccaggg tcgttcgtga atgtcagctg cccctggtac ctgcccgtgg ccagcagtg gcccagggc cacgtgtacc ggttctgcac agctgaaggc ctctggctgc agaaggacaa ctccagcctg ccctggaggg acttgctcga gtgcgaggag tccaagcgag ggagagagaag ctccccggag gagcagctcc tgttctcta catcatctac accgtgggct acgcactctc ctctctgtct ctggttatcg cctctgcgat cctcctcggc ttccagacacc tgcactgcac caggaactac atccacctga acctgtttgc atccttcac ctgcgagcat tgtccgtctt catcaaggac gcagccctga agtggatgta tagcacagcc gccacagcag accagtggga tgggctcctc tcctacctgg actctctgag ctgccgcctg gtgtttctgc tcatgcagta ctgtgtggcg	Homo sapiens

[illegible]

[illegible]



[illegible]

Ls19072

405 19501

G Protein-  
Coupled  
Receptor  
KIAA0758

AB018301

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Homo  
sapiens

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Receptor  
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Homo  
sapiens

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411	22925	Latrophilin- 3	NM_015236	gaaaaacacg agccgtggtg tatgtggagg ccccggtgctc tgggtgtaat tctcgttctc A tctgtgaggt gaggcagatg aagccatttc gtggttctgc tgagcatggt cttggcagtg tttttgggag catcacactg tgcccccttt gttaacttgc tagcccgccg tgtcttttgc cccgggtcga atggctggat tgtggaact gcaccgcct cagggtgtt gagcaactga tgggacgac tcagggaccg gcgtttacga aagaaatgtt taatttggtg aattggagga aaaaaacatg gatttttagc aattgaagag caaatgaagg ttccagattt gggatattgg tgtttctggt ttggagaaat tattcttttt ctttttaatt tgaagaaaaa tcatacgtct tggaaatacag aagagaaact agaaatatac gatatttgg ttacatttga acagtcattc ttgaggaaata ctccatacct gagtagacag ccattgtggc atgcagacta ctaattttca tgatgctctt agtccaata attcatgctt tcagccgtgc cccaattcca atggctgtgg tccgcagaga gctatcctgt gagagctatc ctatagagct tcgctgtcca ggaacagacg tcatacatgat agaaagtggc aactatggca ggactgatga caaaatttgt gactctgacc ctgctcagat ggagaatac cgatgttatc tggcagatgc ctataagatt atgtctcaaa gatgcaataa cagaaccacg tgtgcagtgg tggcaggctc tgatgttttt ccagaccctg gtccagggaac ctataaatac cttgaagtgc agtatgaatg tgtcccttac aaagtggaaac aaaaagtgtt tcttgtctct ggactactaa aaggagtata ccagagtga ctttgtttg agtccgacca ccaatctggg gcgtggtgca agaccctct gcaggcatct gacaagattt attatatgcc ctggactccc tacagaactg ataccctgac tgagtattca tccaaggatg acttcattgc tggaaacca actacaacct acaagctccc tcatagggtg gatggcacag gattttagt gtatgatgga gcttgttct tcaacaaaga gcgcaccagg aacatagtaa agtttgattt gcggactagg ataaagagtg gagaggctat catagcaaat gccaatatcc atgataacct ccttaccga tggggaggca aatctgacat agaccctggca gtagatgaga atgggctatg ggtaattctat gcaacagaaac aaaacaatgg taaaattgtc attagtcaat tgaaccctta caccctacgg atcgaaaggaa catgggatac tgcataatgat aaaaggtcag cttccaatgc ctttatgatt tgtggaattc tgtatgtggt caaatctgta tatgaggatg atgacaaatga ggctactgga aataagattg actacattta caacactgac caaagcaagg atagtttgggt ggatgtacct tttcctaatt cataccagta cattgcagct gtggattaca acccaggga caacctactt tatgtatgga ataactatca cgtcgtgaaa tattcttgg attttgacc tctggatagt agatcagggc aggcacatca tggacaagtt tcatacattt	Homo sapiens

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 22925 Latrophilin- NP\_056051.1 MWPSQLLIIFM MLLAPIIHAF SRAPIPMAV RRELSCESYP IELRCPGTDV IMIESANYGR P  
 3 TDDKICSDP AQMENIRCYL PDAYKIMSQR CNNRTOCAV AGPDVFPDPC PGTYKYLEVQ

Homo  
sapiens

413	25359	G Protein- Coupled Receptor GPR34	NM_005300	<p> YECVPYKVEQ KVFCLPGLLK GYQSEHLEF SDHQSGAWCK DPLQASDKY YMPWTPYRTD  TLTEYSKDD FIAGRPTTTY KLPHRVDTG FVVDGALFF NKERTRNIVK FDLTRIKSG  EAIIANANYH DTSPIRWGGK SDIDLAVDEN GLWVIYATEQ NNGKIVISQL NPYTLRIEGT  WDTAYDKRSA SNAFMICGIL YVVKSVYEDD DNEATGNKID YIYNTDQSKD SLVDVFPFNS  YQYIAAVDYN PRDNLLYVNN NYHVVKYSLD FGPLDSRSGQ AHGQVSYIS PPIHLDSELE  RPSVKDISTT GPLMGSTTT NYTLRTTLLS SRNRSTSTP GRNRSTSTP SPAVEVLDDM  TTHLPASSQ IPALEESCEA VEAREIMWFK TRQGIQIAKQ CPAGTIGVST YLCLAPDGIW  DPQGPDLNLC SSPWNHITQ KLKSGETAAN IARELAEQTR NHLNAGDITY SVRAMDQLVG  LLDVQLRNLT PGGKDSAARS LNKLQKRERS CRAYVQAMVE TVNNLLQPOA LNAWRDLTTS  DQLRAATMML HTVEESAFVL ADNLLKTDIV RENTDNKLE VARLSTEGNL EDLKFPENMG  HGSTIQLSAN TLKQNGRNGE IRVAFVLYNN LGPYLSTENA SMKLGTEALS TNHSHVIVNSP  VITAAINKKEF SNKVYLADPV VFTVKHIKQS EENFNPCSF WSYSKRTMTG YWSTQGCRLI  TTNKTHTTCS CNHLTNFAVL MAHVEVKHSD AVHDLILLDVI TWVGILLSLV CLLICIFTEC  FFRGLQSDRN TIHKNLCISL FVAELLFLIG INRTDQPIAC AVFAALLHFF FLAAFTWMFL  EGVQLYIMLV EVFESEHSRR KYFYLVGGM PALIVAVSAA VDYSYGTDK VCWLRLDTYF  IWSFIGPATL IIMLNVIIFLG IALYKMFHT AILKPESGCL DNINYEDNRP FIKSWVIGAI  ALLCLGLTW AFGLMYINES TVIMAYLFTI FNSLQGMFIF IFHCVLQKKV RKEYGKCLRT  HCCSGKSTES SIGSGKTSQS RTPGRYSTGS QSRIRRMWND TVRKQSESEF ITGDINSSAS  LNREPYRETS MGVKLNIAVQ IGASEQCQGY KCHGYSTTEM  atgagaagtc ataccataac aatgacgaca acttcagtc  cacagaatgc gctttataac caatcatagc gaccaaccgc caaaaaactt ctacagcaaca  cctctgtgta ttttcacgt gggactggtt gggacacataa tcgcccctcta tgtatttctg  ggattacc gtaaaagaaa ttccattcaa atttatctac ttaacgtagc cattgcagac  ctcctactca tcttctgcct cctttccga ataatgtatc atattaacca aaacaagtgg  acactagggtg tgattctgtg caaggtgtg ggaacactgt tttatatgaa catgtacatt  agcattattt tgcttggtt catcagttt gacgctata taaaaattaa tcggtctata  cagcaaacgga aggcaataac aaccaaaca agtatttatg tctgtgtat agtatggatg  cttgctcttg gtggattcct aactatgatt atttaaacac ttaagaaaagg aggcataat  tcacaaatgt gttccatta cagagataag cataacgcaa aaggagaagc catttttaac  ttcattcttg tggtaattgt ctggctaatt tcttactaa taatcctttc atatattaag  attgggaaga atctattgag gatttctaaa aggaggtcaa aatttcctaa ttctggtaaa  tatgccacta cagctcgtaa ctctttatt gacttatca tttttactat atgttttgtt  ccctatcatg cctttcgatt catctacatt tcttcacagc taaatgtatc atcttgctac  tggaagaaaa ttgttcacaa aaccaatgag atcatgctgg tctctcatc ttccaatagt  tgcttagatc cagtcattga tttcctgatg tccagtaaca ttcgcaaaaat aatgtgcaa  cttcttttta gacgatttca aggtgaacca agtagagtg aaagcatttc agaattttaa  ccaggatact cctgcgatga tacatctgtg gcagtgaataa tacagtctag ttctaaaaagt  acttga </p>	Homo sapiens
414	25359	G Protein- Coupled	NP_005291.1	<p> MRSHTITMTT TSVSSWPYSS HRMRFITNHS DQPPQNFSA PNVVTCPMDE KLLSTVLTS P  YSVIFIVGLV GNIALYVFL GIHRKRNSIQ IYLLNVAIAD LLLIFCLPFR IMYHINQNKW </p>	Homo sapiens

Receptor  
GPR34

415

30698 G Protein-  
Coupled

Receptor

Ls30698

AX068267

TLGVILCKV GTLFYNNMYI SIILLGFISL DRYIKINRSI QQRKAITTKQ SIYVCCIVWM  
 LALGGFLTMI ILTLKKGHN STMCIFYRDK HNAKGEAIFN FILVMFWLI FLLILSYIK  
 IKNLLRISK RRSKEPNSGK YATTARNSEI VLIIFTICFV PYHAFRFIYI SSQNVSSCY  
 WKEIVHKTNE IMLVLSSEFS CLDPVMYFLM SSNIRKIMCQ LLFRRFQGEF SRSESTSEFK  
 PGYSLHDTSV AVKIQSSSKS T  
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Homo  
sapiens

416 30698 G Protein-  
Coupled  
Receptor  
Ls30698 CAC27252.1

Homo  
sapiens

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HII FALLNAF QGFFILLFGT IMDHKIRDAL RMRSSSLK GK SRAAENASLG PTNGSKILMNR  
QG

417 30875 G Protein-  
Coupled  
Receptor  
GPR87/GPR95 NM\_023915

Homo  
sapiens

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418	30875	G Protein-Coupled Receptor	NP_076404.1	NP_076404.1	gtgtaggcct tttattgttt tttaaaaaaa aa ttcattatcc ttaaaaaaaa aa MGFNLTIAKL PNNEHGOES HNSGNRSDGP GKNTTLHNEF DTIVLPVLYL IIFVASILLN P GLAVWIFHI RNKTSFIFYL KNIVVADLIM TLTFPFRIVH DAGFGPWYFK FILCRYTSVL FYANMYTSIV FLGLISIDRY LKVVKPFQGS RMYSTFTKV LSVCVWVIMA VLSLPNIILT NGQPTEDNIH DCSKLKPLG VKWHTAVTVV FTFCLPYHL CRIPFTFSLH DRLIDESAQK RYIHKSSRQF ISQSSRRKRH NQSIKRVAV PIIYFFMCRS FSRRLFKKS IRTRSESIRS LQSVRRSEVR IYDYTDV FLSACNVCLD PIIYFFMCRS FSRRLFKKS IRTRSESIRS LQSVRRSEVR IYDYTDV ggccttatct ttccagtcct ccagctgact ctgccccacc cagcccgagg tgcactgacc A atgagcctca actcctccct cagctgcagg aagagagctga gtaatctcac tgaggaggag ggtggcggaag ggggcgtcat catcacccag ttcatcgcca tcatgtcat caccattttt gtctgctctg gaaacctggt catcgtggtc acctgtaca agaagtccta cctcctcacc ctcagcaaca agttcgtctt cagcctgact ctgtccaaact tctgctgtc cgtgtggtg ctgccttttg tggtagcagag ctccatccgc agggaatgga tctttggtg agtgggtgc aacttctctg cctcctcta cctgctgac agctctgcca gcatgctaac cctcggggtc attgccatcg accgctacta tctgtctctg taccctatgg tttaccccat gaagatcaca gggaaccggg ctgtgatggc actgtgtctac atctggcttc actcgtcat cggctgctg ccaccctgt ttggttggtc atccgtggag tttagcagat tcaaatggat gttgtggtt gcttggaacc gggagcctgg ctacacggcc ttctggcaga tctggtgtg cctcttccc ttctgtgcca tctggtgtg ctatggcttc atcttccgcg tggccagggt caaggcacgc aaggtgcact gtggcacagt cgtcatcgtg gaggaggatg ctcagaggac cgggagggaag aactccagca cctccacctc ctcttcaggc agcaggagga atgccttca ggtgtggtc tactcggcca accagtgcga agccctcacc accatcctgg tggctcctcg tgccttcag gtcacctgg gccctacat ggtgtgtcacc gcccttgagg cctctgggg gaaaagctcc gtctcccgga gctggagac ttgggccaca tggctgtcct ttgccagcg tgctgcccac ccccgatct atggactctg gaacaagaca gttcgcgaag aactactgg catgtgcttt gggaccgggt attatcgga accatttgtg caacgacaga ggacttccag gctcttcagc atttccaaca ggtacacaga cctgggcctg tccccacc tcaactgcgt catggcagg ggacagcccc tggggcacag cagcagcacg ggggacactg gcttcagctg ctccagggac tcaggtaacc tgcgtgcttt ataagcctct cactgtcgc gtttccctg tgttgcgtt ccccctgtc gcgtttcccc tgtgcaggct caagagctgg cggaggggca tttccacagg tg	Homo sapiens
419	31568	G Protein-Coupled Receptor	NM_007369	NM_007369	gtgtaggcct tttattgttt tttaaaaaaa aa ttcattatcc ttaaaaaaaa aa MGFNLTIAKL PNNEHGOES HNSGNRSDGP GKNTTLHNEF DTIVLPVLYL IIFVASILLN P GLAVWIFHI RNKTSFIFYL KNIVVADLIM TLTFPFRIVH DAGFGPWYFK FILCRYTSVL FYANMYTSIV FLGLISIDRY LKVVKPFQGS RMYSTFTKV LSVCVWVIMA VLSLPNIILT NGQPTEDNIH DCSKLKPLG VKWHTAVTVV FTFCLPYHL CRIPFTFSLH DRLIDESAQK RYIHKSSRQF ISQSSRRKRH NQSIKRVAV PIIYFFMCRS FSRRLFKKS IRTRSESIRS LQSVRRSEVR IYDYTDV FLSACNVCLD PIIYFFMCRS FSRRLFKKS IRTRSESIRS LQSVRRSEVR IYDYTDV ggccttatct ttccagtcct ccagctgact ctgccccacc cagcccgagg tgcactgacc A atgagcctca actcctccct cagctgcagg aagagagctga gtaatctcac tgaggaggag ggtggcggaag ggggcgtcat catcacccag ttcatcgcca tcatgtcat caccattttt gtctgctctg gaaacctggt catcgtggtc acctgtaca agaagtccta cctcctcacc ctcagcaaca agttcgtctt cagcctgact ctgtccaaact tctgctgtc cgtgtggtg ctgccttttg tggtagcagag ctccatccgc agggaatgga tctttggtg agtgggtgc aacttctctg cctcctcta cctgctgac agctctgcca gcatgctaac cctcggggtc attgccatcg accgctacta tctgtctctg taccctatgg tttaccccat gaagatcaca gggaaccggg ctgtgatggc actgtgtctac atctggcttc actcgtcat cggctgctg ccaccctgt ttggttggtc atccgtggag tttagcagat tcaaatggat gttgtggtt gcttggaacc gggagcctgg ctacacggcc ttctggcaga tctggtgtg cctcttccc ttctgtgcca tctggtgtg ctatggcttc atcttccgcg tggccagggt caaggcacgc aaggtgcact gtggcacagt cgtcatcgtg gaggaggatg ctcagaggac cgggagggaag aactccagca cctccacctc ctcttcaggc agcaggagga atgccttca ggtgtggtc tactcggcca accagtgcga agccctcacc accatcctgg tggctcctcg tgccttcag gtcacctgg gccctacat ggtgtgtcacc gcccttgagg cctctgggg gaaaagctcc gtctcccgga gctggagac ttgggccaca tggctgtcct ttgccagcg tgctgcccac ccccgatct atggactctg gaacaagaca gttcgcgaag aactactgg catgtgcttt gggaccgggt attatcgga accatttgtg caacgacaga ggacttccag gctcttcagc atttccaaca ggtacacaga cctgggcctg tccccacc tcaactgcgt catggcagg ggacagcccc tggggcacag cagcagcacg ggggacactg gcttcagctg ctccagggac tcaggtaacc tgcgtgcttt ataagcctct cactgtcgc gtttccctg tgttgcgtt ccccctgtc gcgtttcccc tgtgcaggct caagagctgg cggaggggca tttccacagg tg	Homo sapiens
420	31568	G Protein-Coupled Receptor	NP_031395.1	NP_031395.1	gtgtaggcct tttattgttt tttaaaaaaa aa ttcattatcc ttaaaaaaaa aa MGFNLTIAKL PNNEHGOES HNSGNRSDGP GKNTTLHNEF DTIVLPVLYL IIFVASILLN P GLAVWIFHI RNKTSFIFYL KNIVVADLIM TLTFPFRIVH DAGFGPWYFK FILCRYTSVL FYANMYTSIV FLGLISIDRY LKVVKPFQGS RMYSTFTKV LSVCVWVIMA VLSLPNIILT NGQPTEDNIH DCSKLKPLG VKWHTAVTVV FTFCLPYHL CRIPFTFSLH DRLIDESAQK RYIHKSSRQF ISQSSRRKRH NQSIKRVAV PIIYFFMCRS FSRRLFKKS IRTRSESIRS LQSVRRSEVR IYDYTDV FLSACNVCLD PIIYFFMCRS FSRRLFKKS IRTRSESIRS LQSVRRSEVR IYDYTDV ggccttatct ttccagtcct ccagctgact ctgccccacc cagcccgagg tgcactgacc A atgagcctca actcctccct cagctgcagg aagagagctga gtaatctcac tgaggaggag ggtggcggaag ggggcgtcat catcacccag ttcatcgcca tcatgtcat caccattttt gtctgctctg gaaacctggt catcgtggtc acctgtaca agaagtccta cctcctcacc ctcagcaaca agttcgtctt cagcctgact ctgtccaaact tctgctgtc cgtgtggtg ctgccttttg tggtagcagag ctccatccgc agggaatgga tctttggtg agtgggtgc aacttctctg cctcctcta cctgctgac agctctgcca gcatgctaac cctcggggtc attgccatcg accgctacta tctgtctctg taccctatgg tttaccccat gaagatcaca gggaaccggg ctgtgatggc actgtgtctac atctggcttc actcgtcat cggctgctg ccaccctgt ttggttggtc atccgtggag tttagcagat tcaaatggat gttgtggtt gcttggaacc gggagcctgg ctacacggcc ttctggcaga tctggtgtg cctcttccc ttctgtgcca tctggtgtg ctatggcttc atcttccgcg tggccagggt caaggcacgc aaggtgcact gtggcacagt cgtcatcgtg gaggaggatg ctcagaggac cgggagggaag aactccagca cctccacctc ctcttcaggc agcaggagga atgccttca ggtgtggtc tactcggcca accagtgcga agccctcacc accatcctgg tggctcctcg tgccttcag gtcacctgg gccctacat ggtgtgtcacc gcccttgagg cctctgggg gaaaagctcc gtctcccgga gctggagac ttgggccaca tggctgtcct ttgccagcg tgctgcccac ccccgatct atggactctg gaacaagaca gttcgcgaag aactactgg catgtgcttt gggaccgggt attatcgga accatttgtg caacgacaga ggacttccag gctcttcagc atttccaaca ggtacacaga cctgggcctg tccccacc tcaactgcgt catggcagg ggacagcccc tggggcacag cagcagcacg ggggacactg gcttcagctg ctccagggac tcaggtaacc tgcgtgcttt ataagcctct cactgtcgc gtttccctg tgttgcgtt ccccctgtc gcgtttcccc tgtgcaggct caagagctgg cggaggggca tttccacagg tg	Homo sapiens
421	36534	G Protein-Coupled Receptor	NM_003667	NM_003667	gtgtaggcct tttattgttt tttaaaaaaa aa ttcattatcc ttaaaaaaaa aa MGFNLTIAKL PNNEHGOES HNSGNRSDGP GKNTTLHNEF DTIVLPVLYL IIFVASILLN P GLAVWIFHI RNKTSFIFYL KNIVVADLIM TLTFPFRIVH DAGFGPWYFK FILCRYTSVL FYANMYTSIV FLGLISIDRY LKVVKPFQGS RMYSTFTKV LSVCVWVIMA VLSLPNIILT NGQPTEDNIH DCSKLKPLG VKWHTAVTVV FTFCLPYHL CRIPFTFSLH DRLIDESAQK RYIHKSSRQF ISQSSRRKRH NQSIKRVAV PIIYFFMCRS FSRRLFKKS IRTRSESIRS LQSVRRSEVR IYDYTDV FLSACNVCLD PIIYFFMCRS FSRRLFKKS IRTRSESIRS LQSVRRSEVR IYDYTDV ggccttatct ttccagtcct ccagctgact ctgccccacc cagcccgagg tgcactgacc A atgagcctca actcctccct cagctgcagg aagagagctga gtaatctcac tgaggaggag ggtggcggaag ggggcgtcat catcacccag ttcatcgcca tcatgtcat caccattttt gtctgctctg gaaacctggt catcgtggtc acctgtaca agaagtccta cctcctcacc ctcagcaaca agttcgtctt cagcctgact ctgtccaaact tctgctgtc cgtgtggtg ctgccttttg tggtagcagag ctccatccgc agggaatgga tctttggtg agtgggtgc aacttctctg cctcctcta cctgctgac agctctgcca gcatgctaac cctcggggtc attgccatcg accgctacta tctgtctctg taccctatgg tttaccccat gaagatcaca gggaaccggg ctgtgatggc actgtgtctac atctggcttc actcgtcat cggctgctg ccaccctgt ttggttggtc atccgtggag tttagcagat tcaaatggat gttgtggtt gcttggaacc gggagcctgg ctacacggcc ttctggcaga tctggtgtg cctcttccc ttctgtgcca tctggtgtg ctatggcttc atcttccgcg tggccagggt caaggcacgc aaggtgcact gtggcacagt cgtcatcgtg gaggaggatg ctcagaggac cgggagggaag aactccagca cctccacctc ctcttcaggc agcaggagga atgccttca ggtgtggtc tactcggcca accagtgcga agccctcacc accatcctgg tggctcctcg tgccttcag gtcacctgg gccctacat ggtgtgtcacc gcccttgagg cctctgggg gaaaagctcc gtctcccgga gctggagac ttgggccaca tggctgtcct ttgccagcg tgctgcccac ccccgatct atggactctg gaacaagaca gttcgcgaag aactactgg catgtgcttt gggaccgggt attatcgga accatttgtg caacgacaga ggacttccag gctcttcagc atttccaaca ggtacacaga cctgggcctg tccccacc tcaactgcgt catggcagg ggacagcccc tggggcacag cagcagcacg ggggacactg gcttcagctg ctccagggac tcaggtaacc tgcgtgcttt ataagcctct cactgtcgc gtttccctg tgttgcgtt ccccctgtc gcgtttcccc tgtgcaggct caagagctgg cggaggggca tttccacagg tg	Homo sapiens

Receptor  
GPR49

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422	36534	G Protein- Coupled Receptor GPR49	NP_003658.1	<p>tcctgtgact caactcaagc cttggttaacc ttaccagct ccagcatcac ttatgacctg  cctccaggt ccgtgccatc accagcttat ccagtgactg agagtgcca tcttctctct  gtggcatttg tcccatgtct ctaa</p> <p>PSNLSVFTSY LDLSMNNISQ LLPNPLPSLR FLEELRLAGN ALTYIPKGF TGLYSLKVL  LQNNQLRHVP TEALQNLRSL QSLRLDANHI SYVPPSCFSG LHSRLHLWLD DNALTEIPVQ  AFRSLALQA MTALNKHIIH IPDYAFGNLS SILVHLHNN RIHLSLEKCF DGLHSLTLD  LNYNNLDEFP TAIRTLSNLK ELGFHSNNIR SIPEKAFVGN PSLITIHFYD NPIQFVGRSA  FQHLPELRTL TLNGASQITE FPDLTGTANL ESILTGAQI SSLPQTVCNQ LPNLQVLDLS  YNLLEDLPSE SVCQKLQKID LRHNEIYEIK VDTFQQLLSL RSLNLAWNKI AIIHENAFAST  LPSLIKLDLS SNLLSFPIT GLHGLTHLKL TGNHALQSLI SSENPELVK IEMPAYQCC  AFGVCENAYK ISNQWKNQDN SSMDDLHKKD AGMFOAQRD DLEDFLLDFE EDLKALHSVQ  CSPSPGPFKP CEHLIDGWL I RIGVWTIAVL ALTGNALVTS TVFRSPLYIS PIKLLIGVIA  AVNMLTGVS AVLAGVDAFT FGSFARHGAW WENGVGCHVI GFLSIFASES SVFLLTLAAL  ERGFVVKYSA KFETKAPFSS LKVIILICAL LALTMAAVPL LGGSKYGASP LCLPLPFGEF  STMGYMVALI LNSLCFLMM TIAYTKLYCN LDKGDLENIW DCSMVKHIAL LLFTNCILNC  PVAFLSFSSL INLTFFISPEV IKFILLVVVP LPACLNPLLY ILFNPHEKED LVSLRKQTYV  WTRSKHPSLM SINSDDVEKQ SCDSTQALVT FTSSSITYDL PPSSVPSPAY PVTESCHLSS  VAFVPC</p>	Homo sapiens
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPRI)	NM_004736	<p>actagagatg gcggcgccgc tgctctgaag agacctcggc ggcggcggag gaggagagaa A  gcgcagcgc gcgcgcgcgc ggggcccatg tggggaggag tcggagtcgc tgttgccgc  gccgcctga gctgctggac ccgagtgga gtaggggga aacggcagga tgaagtgcg  cgagcacctc tcgcgcaca tcactccga gtgagggaag caatacatcc agtatgaggc  tttcaaggat atgtgtatt cagctcagga ccaggcacct tctgtggaag ttacagatga  ggacacagta aagaggtatt ttgccaaagt tgaagagaag tttttccaaa cctgtgaaaa  agaacttgcc aaatcaaca cattttattc agagaagctc gcagaggctc agcgcagggt  tgctacactt cagaatgagc ttcagtcac actggatgca cagaaagaaa gcactgggtg  tactacgctg cgacaacgca gaaagccagt ctccacttg tcccatgagg aacgtgtcca  acatagaaat attaaagacc ttaaactggc ctccagtga tctacatcca gtctaactct  gctgcagaac tatcagaatc tgaattttac agggtttcga aaaatccctga aaagcatga  caagatcctg gaaacatctc gtggagcaga ttggcgagtg gctcacgtag aggtggcccc  attttatata tgcaagaaaa tcaaccagct tatctctgaa actgaggctg tagtgaccaa  tgaaattgaa gatggtgaca gacaaaaggc tatgaagcgt ttacgtgtcc cccctttggg  agctgctcag cctgcaccag catggactac ttttagagtt ggcctatttt gtggaatatt  cattgtactg aatattaccc ttgtgcttgc cgtgtatatt aaacttgaaa cagatagaag  tatatggccc ttgataagaa tctatcgggg ttgctttctt ctgattgaat tcctttttct  actgggcac aacagctatg gtggagaca ggctggagta aacctgtac tcatctttga  acttaatccg agaagcaatt tgtctcatca acatctctt gagattgctg gattcctcgg  gatattgtgg tgcctgagcc ttctggcatg ctctcttctt ccaattagtg tcatccccc  atatgtgtat ccacttgccc ttatggatt tatggtttct ctccttatca accccaccaa  aactttctac tataatccc ggttttggt gcttaaaactg ctgtttcag tatttacagc</p>	Homo sapiens

424	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	<p> ccccctccat aaggtaggct ttgctgattt ctgggtggcg gatcagctga acagcctgtc  agtatactg atggacctgg aatataatgat ctgcttctac agtttggagc tcaaatggga  tgaagaagaa ggcctgttgc caaataattc agaagaatca ggaatttggc acaatatac  atatgtgtg cgggccattg ttcatgtcat tctgtcttgg ctctgcttca tccagtgcct  gcgccatat cgagacacaa aaagggcctt tctcatttta gtaaatgctg gcaagtactc  cacaacttct tcatgtgtg cgtttgcagc ctttacagc actcacaag aacgaggcca  ctcgacact atggtgttct ttacactgtg ggtgtcttct tatacatca gttcctgcta  tacctcatc tgggatctca agatggactg ggtgtcttct gataagaatg ctggagagaa  cactttctc cgggaagaga ttgtataccc ccaaaaagcc tactactact gtgccataat  agaggatgtg attctgcgct ttgcttgac tatccaaatc tcgattacct ctacaactt  gtgcctcat tctggggaca tcattgctac tgtcttggc ccacttgagg ttttccggcg  attgtgtgg aacttcttcc gcctggagaa tgaacatctg aataacttg gtgaattccg  tgctgtcgg gacatctctg tggccccct gaacgagat gatcagactc tctagaaca  gatgatggac caggatgatg ggttacgaaa cggcagaag aatcgggtcat ggaagtacaa  ccagagcata tccctgcgcc ggcctgcct cgcttctcaa tccaaggctc gtgacactaa  ggtattgata gaagacacag atgatgaagc taacacttga atttctgaa gtctagctta  acatcttgg ttttctact ctacaatcct ttcctgacc aacgcaacct ctagtacctt  tccagccgaa aacaggagaa aacacataac agcttctccg agcttctccg gatcggatcc  tatggactcc aaacaagctc actgtgttct tttcttctc tctgttctt attttaattt  tctattttca aaacaagtat ttacttctt ttgcaatcag aggatgtttt aagaaacaaa  acatagtatc ttatggattg ttacacata caaggacata gatacctatc aggatgaaga  acaggcattg caaggacctc ctgatgggac ggtactgaga tatctcggct tccgctcagc  ccggttttga atggttgaaa ccggacattg gttttaaatt ttttgtcag ttatgtgga  gaattttttt ctttcttca taccagcgc aaaggcactg gccgcacttg caggaaaagt  gcaacttaaa gcagtacctt cattcatgaa gctacttttt aatttgatgt aacttttctt  attttgggaa ggtgtgctg gtgggtggga aatatgatgt attgttaca catagttttc  tcattattta tgaacttaaa ccatacagaa tgatataact cctgtgcaat gaagtgata  acagtaaaag aagcaggag aaaaaaaa  TCEKELAKIN TFYSEKLAEE QRREATLQNE LQSLDAQKE STGVTLRQR RKPVFHLSHE  ERVQHRNIKD LKLAFFSEFYL SLILLQNYQN LNFTGFRKIL KKHDKILETS RGADWRVAHV  EVAPFYTCCK INQLISETEA VTNLEEDGD RQKAMKRLRV PPLGAAQAP AWTTFRVGLF  CGIFIVLNI LVLAAVFKLE TDRSIWPLIR IYRGGFLLIE FLFLIGINTY GWRQAGVNHV  LIFELNPRSN LSHQLFEIA GFLGILWCLS LLACFAPIS VIPTYVYPLA LYGFVFFLI  NPTKTFYYS RFWLLKLLER VFTAPFHKVG FADFWLADQL NSLSVILMDL EYMICFYSLE  LKWDESKGLL PNNSESGIC HKYTYGVRAI VQCI PAWLRF IQCLRRYRDT KRAFPPLVNA  GKYSTTFMW AFAALYSTHK ERGSHDTMVF FYLWIVFYII SSCYTLIWDL KMDWGLFDKN  AGENTFLREE IVYPOKAYY CAIIEDVILR FAWTIQISIT STTLPHSGD IATVFAPLE  VFRFVWNFF RLENEHNNC GEFRAVRDIS VAPLNADDQT LLEQMMDQDD GVRNRQKNRS  WKYNQISLR RPRLASQSKA RDTKVLIEDT DDEANT </p>	Homo sapiens
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425	40881	Lung Seven Transmembran e Receptor 2 (LUSTER2)	AX073578	<p>agagatggca gtgagcgaga ggaggggggt cgcccgcggg agcccccgag agtgggggca A</p> <p>gcggtactt ctggtgctgc tgttggtgg tgctccggg cgcattccacc ggctggcgct sapiens</p> <p>gacgggggag aagcgagcg acatccagct gaacagcttc ggtttctaca ccaatggctc</p> <p>tctggaggtg gatttgagcg tccctgggct gggccctccg gaggcagaag agaagtcctt</p> <p>gctggtggg ttcagctca gccgggttcg gctggcaga gttcgctctt attcaaccg</p> <p>ggatttccag gactgccctc tccagaaaaa cagttagcag ttcctggtcc gtttctcat</p> <p>caacaccaag gatttgagcg tccaggtgag gaagtatgga gacgagaaga cgttgtttat</p> <p>ctttcccggt ctcctcccg aagcacctc caaacagggt cccccgaag cacagggccac</p> <p>agtccccgc aaggtggat gcggaggag cctcgagcc agcaagccc agtcaaacacc</p> <p>cgcagtatt cagggtccta gtgggaagga caaggacctg gtgtgggccc tgagccacct</p> <p>caacaactcc tacaactca gtttccaggt ggtgatggc tctcaggcg aagaaggcca</p> <p>gtacagcctg aacttccaca actgcaacaa ttcagtggca gaaaaggagc atccattcga</p> <p>catcacggtg atgatccggg agaagaaccc cgatggcttc ctgtcggcag cggagatgcc</p> <p>ctttttcaag ctctacatgg tcatgtccgc ctgcttctcg gccgtggca tcttctgggt</p> <p>gtccatcctc tgcaggaaca cgtacagcgt cttcaagatc cactggctca tggcggcctt</p> <p>ggccttcacc aagagcatct ctctcctct ccacagcatc aactactact tcatcaacag</p> <p>ccaggggcac cccatcgaag gccttgccgt catgtactac atcgcacacc tgctgaagg</p> <p>cgcctcctc ttcataacca tgcctctgat tggctcaggc tgggcttca tcaagtacgt</p> <p>cctgtcggat aaggagaaga agtcttttgg gatcttgatc cccatgcagg tccgtggcaa</p> <p>cgtggcctac atcatcatcg agtcccgcga ggaagcgcc agcgactacg tgcgttgga</p> <p>ggagattttg tctctggtgg acctcatctg ctgtgtgccc atcctgttcc ccgtagtctg</p> <p>gtccatccgg catctccagg atgctctcgg cacagacgg aaggtggcag tgaacctggc</p> <p>caagctgaag ctgtcccgcc attactatgt catggtctac tgctacgtct acttaccgcg</p> <p>catcatgcc atctgtctgc aggtggctgt gccctttcag tggcagtggc tgtaccagct</p> <p>cttgggtgag ggctccacc tggccttctt cgtgctcag ggctacaagt tccagcccc</p> <p>agggaacaac ccgtacctgc agctgcccc aagggacag gaggatgttc agatggagca</p> <p>agtaatgacg gactctgggt tccgggaag cctctccaaa gtcaacaaaa cagccagcgg</p> <p>gcgggaactg ttatgatcac ctccacatct cagaccaag ggtcgtcctc cccagcatt</p> <p>tctcactcct gcccttcttc cacagcgtat gtggggaggt ggaaggggtc catgtggacc</p> <p>aggcggccag ctccccggga ccccggttcc cggacaagcc catttggaag aagagtcctt</p> <p>tcctccccc aaatatggg cagccctgtc cttaccccg gaccacccct cccttccagc</p> <p>tatgtgtaca ataagacca atctgtttg ct</p>	Homo sapiens
426	40881	Lung Seven Transmembran e Receptor 2 (LUSTER2)	CAC28410.1	<p>MAVSERRGLG RGSPAEMGQR LLLVLLGCG SGRIHRLALT GEKRAIQLN SFGFTNGSL P</p> <p>EVELSVLRG LREAERKSL L VGFSLSRVRS GRVRSYSTRD FQDCPLQKNS SSFLVLFLIN</p> <p>TKDLQVQRK YGEQTLFIF PGLLPEAPSK PGLPKPQATV PRKVDGGGTS AASKPKSTPA</p> <p>VIQPSGKDK DLVLGLSHL NSYNFSFHV IGSOAEEGQY SLNFHNCNNS VPGKEHPFDI</p> <p>TVMIREKNPD GFLSAEMPL FKLYMMSAC FLAAGIFWVS ILCRNTYSVF KIHWMALAA</p> <p>FTKSISLLEH SINYIFINSQ GHPIEGLAVM YYIAHLKGA LLFITIALIG SGWAFIKYVL</p> <p>SDKEKKVFGI VIPMQVLAV AYIIIESREE GASDYVLWKE ILFLVDLIC GAILFPVWVS</p> <p>IRHLQDASGT DGKAVNLAK LKLFRRHYVM VICYVYFTRI IAILQVAVP FQWQWLYQLL</p> <p>VEGSTLAFFV LTGYKEQPTG NNPYLQLPQE DEEDVQMEQV MTDSGFREGI SKVNKTASGR</p>	Homo sapiens

427	42697	G Protein-Coupled Receptor GPR64	NM_005756	ELL	Homo sapiens
				<p> agccagcccg aggacgcgag cggcaggtgt gcaacagaggt tctccacttt gttttctgaa A  ctcgcggtca ggatgggtttt ctcgtgcagg cagtgtggcc atgttggcag aactgaagaa  gttttactga cgttcaagat attccttgtc atcatttgtc ttcattgtcgt tctgtgtaaca  tccctggaag aagatactga taattccagt ttgtcaccac cacctgctaa attatctgtt  gtcagttttg cccctcctc caatgaggtt gaacaacaa gcctcaatga tgttacttta  agcttactcc cttaaacga acagaaaaa actaaatga ctatagtaaa aacctcaat  gcttcaggcg tcaaacccca gagaaatata tgaactttgt catctatttg caatgactca  gcatttttta gaggtgagat catgtttcaa tatgataaaag aaagcactgt tccccagaat  caacatataa cgaatggcac cttaactgga gtccctgtct taagtgaatt aaaacgctca  gagctcaaca aaacctgca aacctaaagt gagacttact ttataatgtg tgctacagca  gaggcccaaa gcacattaaa ttgtacattc acaataaac tgaataatgc aatgaatgca  tgtgtgcaaa tagccgtttt ggaaagagta aagattcgac caatggaaca ctgctgtctgt  tctgtcagga taccctgccc ttctctccca gaagagttgg gaaagcttca gtgtgacctg  caggatccca ttgtctgtct tgtgacctat ccacgtggcc caccattttc ttccagccaa  tccatccccc tgggtgctcg ggcactgtg ctttcccagg tcccaaaag tacctctttt  gctgagcctc cagattattc acctgtgacc cacaatgttc cctctccaat aggggagatt  caacctttt caccagcc ttcagctccc atagcttcca gccctgccat tgacatgccc  ccacagtctg aaacgatctc ttccctatg ccccaaaccc atgtctccgg caccctacc  cctgtgaaag cctcattttc ctctccacc gtgtgccc ctgcgaatgt caacactacc  agcgcacctc ctgtccagac agacatcgtc aacaccagca gtatttctga tcttgagaac  caagtgttc agatggagaa ggctctgtcc ttgggagcc ttgagcctaa cctgcagga  gaaatgatca accaagtcag cagactcctt cattcccg ctgacatgct ggcccctctg  gtcctaaagt tgcgaaagt agtggatgac attggcctac agctgaactt ttcaaacacg  actataagtc taacctcccc ttctttggct ctggctgtga tcagagtga tcccagtagt  ttcaacacaa ctacctttgt ggcccaagac cctgcaaatc ttcaggtttc tctggaaccc  caagctcctg agaacagtat tggcacaatt actcttctt catcgtgat gaataattta  ccagctcatg acatggagct agcttccagg gtccagttca attttttga aacacctgct  ttgtttcagg atccttccct ggagaacctc tctctgatca gctacgtcat atcatcgagt  gttgcaaac tgaccgtcag gaacttgaca agaaacgtga cagtcacatt aaagcacatc  aacccagacc aggatgagtt aacagtga tgtgtattt gggacttggg cagaaaatggt  ggcagaggag gctgtcaga caatggctgc tctgtcaaa acaggagatt gaatgaaacc  atctgtacct gttagccatc acaagcttc ggcgttctc tggacctatc taggacatct  gtgctgcctg ctcaaatgat ggctctgacg ttctattcat atattgggtg tgggcttca  tcaatttttc tgtcagtgac tcttgaacc tacatagct ttgaaaagat cggagggat  taccttcca aaatcctcat ccagctgtgt gctgctctgc ttctgtgaa cctggtcttc  ctcctggact cgtggattgc tctgtataag atgcaagcc tctgcatctc agtggctgta  tttcttcatt attttctct ggtctcatt acatggatgg gcctagaagc attccatag  tacctggccc ttgtcaaat atttaatac tacatccgaa aatacatcct taaattctgc  attgtcgggt ggggggtacc agctgtgggt gtgaccatca tctgactat atccccagat </p>	

Homo sapiens

Receptor  
GPR64

429	45937	KIAA1624	AF376725	Protein	Homo sapiens
GEIMFOYDKE	STVPQNHIT	NGTLTGVL	SELKRSELNK	TIQTLSETYF	IMCATAEAQS
TLNCTFTIKL	NNTMNACAAI	AALERVKIRP	MEHCCCSVRI	PCPSSPEELG	KLQCDLQDPI
VCLADHPRGP	PFSSSQSIPV	VPRATVLSQV	PKATSAEAPP	DYSPVTHNVP	SPIGEIQPLS
QPSAPIASS	PAIDMPPQSE	TISSPMPOTH	VSGTPPPVKA	SFSSPTVSAP	ANVNTTSAPP
VQTDIVNTSS	ISDLENQVLQ	MEKALSLSL	EPNLAGEMIN	QVSRLLHSPP	DMLAPLAQRL
LKVDDDIGLQ	LNFSNTTISL	TSPSLALAVI	RVNASSEMTT	TFVAQDPANL	QVSLAQPAPE
NSIGTITLPS	SIMNNLPAHD	MELASRVQFN	FFETPALFQD	PSLENLSLIS	YVISSSVANL
TVRNLTRNVT	VTLKHNPSQ	DELTVRQVFW	DLGRNGGRGG	WSDNGCSVKD	RRLNETICTC
SHLTSFGVLL	DLRSTSVLPA	QMMALTFTY	IGGILSSIFL	SVTLVTYIAF	EKIRRDYPSK
ILIQLCALL	LNILVFLDS	WIALYKMQGL	CISVAVFLHY	FLLVFTWMG	LEAFHMYLAL
VKVFNTYIRK	YILKFCIVGW	GVPAAVVTTI	LTISPDPNYGL	GSYGKFPNGS	PDDFCWINNN
AVEYITVVGY	FCVIFLINVS	MFIVVLVQLC	RIKKKQLGA	QRKTSIQDLR	SIAGLTFELLG
ITWGFAPFAW	GPVNVTFMYL	FAIFNTLQGF	FIFIFCYVAK	ENVRKQWRRY	LCCGKLRLAE
NSDWSKTATN	GLKKQTVNQG	VSSSSNSLQS	SSNSTNSTTL	LVNDCSVHA	SGNGNASTER
NGVSFSVQNG	DVCLHDFTGK	QHMFENEKEDS	CNGKGRMALR	RTSKRGLHF	IEQM
gaacaaacat	ggcgcgtctg	gcgcgcgtcg	gctcccccgc	ctcccgcggt	cctaggctgg A
ccgcgggect	ccggctgctc	ccaatgctgg	gttgctgca	gttgctggcc	gagcctggcc
tgggcgcggt	ccatcacctg	gcactcaagg	atgatgtgag	gcataaagtt	catctgaaca
cccttggtgt	cttcaaggat	gggtacatgg	tggtgaatgc	cagtagcctc	tcactgaatg
agcctgaaga	caaggatgtg	actattggat	ttagcctaga	ccgtacaaag	aatgatggct
ttcttcttta	cctggatgaa	gatgtgaatt	actgtatttt	aaagaaacag	tctgtctctg
tcaccctttt	aatcctagac	atctccagaa	gtgaggtgaag	agtaaatgct	ccaccagaag
ctggtaccca	gttaccaaa	atcatcttca	gcagggtatga	gaaagtccct	ggtcagagcc
aggagcctaa	tgtaaccctt	gcttcagcag	gcaaccagac	ccagaagaca	caagatgggtg
gaaagtctaa	aagaagtaca	gtggattcaa	aggccatggg	agagaaatcc	ttttctgttc
ataataatgg	tggggcagtg	tcatttcagt	ttttctttaa	catcagcact	gatgaccaag
aaggccttta	cagtctttat	ttcataaat	gccttgaaa	agaattgcca	agtgacaagt
ttacattcag	ccttgatatt	gagatcacag	agaagaatcc	tgacagctac	ctctcagcag
gagaaattcc	tctcccaaaa	ttatacatct	caatggcctt	tttcttcttt	ctttctggga
ccatctggat	tcatactctt	cgaaaacgac	ggaatgatgt	atttaaaatc	cactggctga
tggcggccct	tcctttcacc	aagtctcttt	ccttggtgtt	ccatgcaatt	gactaccact
acatctcctc	ccagggtctc	cctatcgaa	gctgggctgt	tgtgtactac	ataactcacc
ttttgaaaag	ggcgtactc	ttcatcacca	ttgcactcat	tggcactggc	tgggctttca
ttaagcacat	cccttctgat	aaagacaaaa	agatcttctat	gattgtcatt	ccactccagg
tcctggcaaa	tgtagcctac	atcatcatag	agtcacacga	ggagggcacg	actgaatatg
gcttggtggaa	ggactctcta	tttctggctc	acctgttgtg	ttgtggtgct	atcctcttcc
cagtgggtgtg	gtcaatcaga	catttacaag	aagcatcagc	aacagatgga	aaagctgcta
ttaacttagc	aaagctgaaa	cttttcagac	attattacgt	cttgattgtg	tggtacatat
acttcactag	gacattgca	tttctcctca	aactcgtgtg	tccattccag	tggaagtggc
tctaccagct	cctggatgaa	acggccacac	tggtcttctt	tggtctaacy	gggtataaat
tccgtccggc	ttcagataac	ccctacctac	aactttctca	ggagaagaaa	gacttgga

[illegible]

432	50847	Neurotensin Receptor type 2	NP_036476.1	<p>acagtgagcc acctgctggc cctctgctcc caagtgcctt ccactttac ccggggcagc</p> <p>tccaccccca gccgcctgga gctgctgagt gagaggggtc tctcagctt catcgatg</p> <p>aagaagacct ttatccaggg aggccaggtc agcctgggtga gacataaaga cgtgcgcggg</p> <p>atccgcagcc tccagcgagc cgtccagggt ctacagagcca tctgtgtcat gtatgtcatc</p> <p>tgctggctgc cgtaccatgc ccgcaggctc atgtactgct acgtacctga tgacgcgtgg</p> <p>actgaccac tgtaaatct ctaccactac ttctactatg tgaccaacac actttttctac</p> <p>gtcagctcag ctgtgactcc tcttctctac aagccgtgtt cctctctctt cagaaaaactc</p> <p>ttcctggaag ccgtcagctc cctgtgtgga gagcaccacc ccatgaagcg gttacccccg</p> <p>aagccccaga gtccaccctt aatggatata gcttcaggct ttggggatcc ccagaaaaacc</p> <p>cggacctgaa tgtaagtcaa gaatgaacag aacaagcaaa atgaccagct gcttagtcac</p> <p>ctggcaaacg aggtgagcaa cctcatcact aatcatctaa gcttcgcagc cagggcgact</p> <p>tctatcaacc cctgctctgc tgagaacctt caagcgcaag gaagccacgt gacctctct</p> <p>agcctcagcg tccctcgtct gtgtagtggg gataaagaac agcaccatc tcttagtgtt</p> <p>gcctgagact aaagtgtcta gcacagaacc tgggtcgtag tagatgctca ataaattttt</p> <p>gctggcacg</p>	Homo sapiens
433	53440	G Protein- Coupled Receptor LS53440	AX107037	<p>RAGRAGRLRH HVLSLALAGL LLLLVGPVE LYSFVWFHYP WVFGDLGCRG YYFVHELCA</p> <p>ATVLSVAGLS AERCLAVCQP LRARSLTTPR RTRWLVALSW AASLGLALPM AVIMGQKHEL</p> <p>ETADGEPEPA SRVCTVLVSR TALQVFIQVN VLVSFVLPLA LTAFLNGTVV SHLLALCSQV</p> <p>PSTSTPGSST PSRLLELSEE GLLSFIVWKK TFIYFGQVSL VRHKDVRIR SLQRSVQVLR</p> <p>AIVVMYVICW LPYHARLMY CYPDDAWTD PLYNFHYFY MVTNLFYVS SAVTPLLYNA</p> <p>VSSFRKLFL EAVSSLCGEH HPMKRLPPKP QSPITMDTAS GFQDPPETRT</p> <p>cagagaggct gtatttcagt gcagcctgcc agacctcttc tggaggaaga ctggacaaag A</p> <p>ggggtcacac attccttcca tacggttagc cctctacctg cctgggtgctg gtcacagttc</p> <p>agcttcttca tgatgggtgga tcccaatggc aatgaatcca gtgtacata cttcatccta</p> <p>ataggcctcc ctgggtttaga agaggctcag ttctgggttg ccttcccatc gtgtccctc</p> <p>taccttattg ctgtgctagg taacttgaca atcatctaca ttgtgcggac tgagcacagc</p> <p>ctgcatgagc ccatgtatat atttctttgc atgtcttcag gcattgacat cctcatctcc</p> <p>acctcatcca tgcccaaaat gctggccatc ttctgggttca attccactac catccagttt</p> <p>gatgcttgct tgctacagat ttttgccatc cactccttat ctggcatgga atccacagtg</p> <p>ctgctggcca tggcttttga ccgctatgtg gccatctgtc acccactgcg ccatgccaca</p> <p>gtacttacgt tgcctcgtgt caccaaaatt ggtgtggctg ctgtgggtgcg gggggctgca</p> <p>ctgatggcac ccttctcgtt cttcatcaag cagctgcctt tctgcccctc caatatcctt</p> <p>tccattcct actgcctaca ccaagatgtc atgaagctgg cctgtgatga tatccgggtc</p> <p>aatgtcgtct atggccttat cgtcatcctc tccgccattg gccctggactc acttctcatc</p> <p>tccttctcat atctgcttat tcttaagact gtgttgggtt tgacacgtga agccccagcc</p> <p>aaggcatttg gcacttcgct ctctcatgtg tgtgctgtgt tcatattcta tgtacctttc</p> <p>attggattgt ccatggtgca tgccttttag aagcggcgtg actctccgct gccctcatc</p> <p>ttggccaata tctatctgct ggttcctcct gtgtcctaac caattgtcta tggagtgaa</p> <p>acaaaggaga ttccgacagc catccttcga cttttccatg tggccacaca cgcttcagag</p> <p>ccctaggtgt cagtgatcaa acttcttttc cattcagagt cctctgattc agattttaat</p>	Homo sapiens

434	53440	G Protein- Coupled Receptor LS53440	CAC38935.1	gttaacattt tggaagacag tattcagaaa aaaaatttcc ttaataaaaa atacaactca gacccctcaa atatgaaact ggttgaggaa tctccatttt ttcaatatta tttctctctt tggtttcttg ctacataata ttattaatac cctgactagg ttgtggttgg aggtttatta cttttcattt taccatgcag tccaaatcta aactgcttct actgatggtt tacagcattc tgagataaga atggtacatc tagagaacat ttgccaagg cctaagcac gcaaaggaaa ataaacacag aatataataa aatgagataa tctagcttaa aactataact tctcttcag aactcccaac cacattggat ctcaagaaaa tctgtcttcc aaaatgactt ctacagagaa gaaataattt ttctcttgga cactagcact taagggaag attggaagta aagccttgaa aagagtacat ttacctacgt taatgaaagt tgacacacgt tctgagagt ttccacagaa tatggaccct gtttttcccta tttaattttc ttatcaacc tttaattagg caaagatat atagtagccc tcaattgtagc catgggaaaa ttgatgttca gtgggatca gtgaattaaa tggtgtcata caagtataaa aattaaaaa aaaaagact tcatgccaa tctcatatga tgtggaagaa ctgttagaga gaccaacagg gtatgggtt agagatttcc agagtcttac attttctaga ggaggtattt aatttcttct cactcatcca gtgttgtatt taggaatttc ctggcaacag aactcatggc tttaatccca ctagtatttg cttattgtcc tggccaatt gccaatacc tgtgtcttgg aagaagtgt tctaggttc accattatgg aagattctta ttcagaaagt ctgcataggg cttatagcaa gttatttatt tttaaaagt ccataggtga ttctgtagg cagttaggtt agggagccac cagttagat gggaaagtat gaatggcagg tcttgaagat aacattggcc ttttgagtgt gactgcagc tggaaagtga gggaaatttc aggaccatgc ttatttggg gctttgtgca gtatggaa ca gggactttga gaccagaaa gcaatctgac ttaggcatgg gaatcaggca ttttgcctc tgagggtta ttaccaaggg ttaatagggt tcatcttcaa caggatatga caacagtgtt aaccaagaaa ctcaaatc aaatactaaa acatgtgatc atatatgttg taagtctcat tttcttttc aatcctcagg ttccctgata tggattccta taacatgctt tcatccctt ttgtaatgga tatcatattt ggaaatgctt atttaatact tgtatttgc tctggactgt aagcccatga gggcactgtt tattattgaa tgcattctct gttcatcatt gactgctctt tgctcatcat tgaatcccc agcaaatgct ctagaacata atagtgtta tgcctgacac cggttatttt tcatcaaac tgattccttc tgcctgaac acatagccag gcaatttcc agccttctt gagtgggta ttattaatt ctggccatta ctccaatgt gagtgaagt gacatgtga atttctatc ctggctcata aaacctccc atgtgcagc ttctatgttg acattaaatg tgacttgga agctatgtgt tacacagagt aaatcaccag aagcctggat ttctgaaaaa actgtgcaga gccaaacctc tgtcatttgc aactcccat tgtatttga cgaggcagt ggataagtga aaaataaagt actattgtgt caagaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa aaaaaa	MMVDPNGNES SATYFILIGL PGLEEAQFWL AFPLCSLYLI AVLGNLTIIY IVRTEHSLHE P PMYIFLCMLS GIDILISTSS MPKMLAIFWF NSTTIQFDAC LQOMFAIHSI SGMESTVLLA MAFDRYVAIC HPLRHATVLT LPRVTKIGVA AVVRGAALMA PLPVFIKQLP FCRSNILSHS YCLHQDVMKL ACDDIRNVV YGLIIVISAI GLDSLISFS YLLILKTVLG LTREAQAKAF GTCVSHVCAV FIFYVPFVIGL SMVHRESKRR DSPLPVLAN IYLLVPPVLN PIVYGVKTKE IRQRIILRFH VATHASEP	Homo sapiens
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435	54053	Gaba (b) Receptor 2	NM_005458	atggcttccc cgcggagggtc cgggcagcca gggcgccgcg cgccgcgcgc accgcccgcc acggccctgg gcgcgcctgc tactgtact gctgtgcgc gctgtgtgc ctctggcgcc ctctggcgcc cggggcctgg ggctggggcg gggcgccccc cggcgccgcg cccagcagcc cgcgcctctc catcatgggc ctcatgccgc tcaccaagga ggtggcccaag ggcagcatcg ggcgcggtgt gctccccgcc gtggaactgg ccctcgagca gatccgcaac gagtcaactc tgcgcccta ctctctgac ctgcggctct atgacacgga gtgcgacaac gcaaaagggt tgaagccctt ctacgatgca ataaaatag ggcgaacca ctgtatggtg tttggaggcg tctgtccatc cgtaacatcc atcattgcag agtcctcca aggtggaat ctggtgcagc ttcttttgc tgaacacag cctgttctag ccgataagaa aaaataccct tatttcttcc ggaccgtccc atcagacaaat gcggtgaatc cagcatttct gaagttgctc aagcactacc agtggaaagc cgtgggcacg ctgacgcaag acgttcagag gttctctgag gtgcggaatg acctgactgg agttctgtat ggcgaggaca ttgagatttc agacaccgag agcttctcca acgatccctg taccagtgtc aaaaagctga aggggaatga tgtcggtatc atccttggcc agtttgacca gaatatggca gcaaaagtgt tctgttgtgc atacgaggag aacatgtatg gtagtaata tcagtggatc attccgggct ggtacgagcc ttcttgggtg gagcaggtgc acacggaagc caactcatcc cgtgcctccc ggaagaatct gcttgcctgc atggagggtc acattggcgt ggatttctgag cccctgagct ccaagcagat caagaccatc tcaggaaaga ctccacagca gtatgagaga gagtacaaca acaagcggtc aggcgtgggg cccagcaagt tcacgggta cgcctacgat ggcatctggg tcatgcgcaa gacactgcag agggccatgg agacactgca tgccagcagc cggcaccagc ggatccagga cttcaactac acggaccaca cgctgggcag gatcatcctc aatgccatga acgagaccaa cttcttcggg gtcaagggtc aagttgtatt ccggaatggg gagagaatgg ggaccattaa atttactcaa ttcaagaca gcaggaggt gaaggtggga gagtacaacg ctgtggccga cacactggag atcatcaatg acaccatcag gttccaagga tccgaaccac caaagacaa gaccatcctc ctggagcagc tgcggaagat ctccctacct ctctacagca tctctctgc cctcaccatc ctcggtatga tcattggccag tgcttttctc ttcttcaaca tcaagaaccg gaatcagaag ctcataaaga tgtcagatcc atacatgaac aaccttatca tcttggagg gatgctctcc tatgttcca tatttctctt tggccttgat ggatcctttg tctctgaaaa gacctttgaa acactttgca ccgtcaggac ctggattctc accgtgggct acacgaccgc ttttggggcc atgtttgcaa agacctggag agtccaacgc atcttcaaaa atgtgaaaat gaagaagaag atcatcaagg accagaaact gcttgtgatc gtggggggca tgcgtctgat cgacctgtgt atcctgatct gctggcaggc tgtggacccc ctgcgaagga cagtgagaa gtacagcatg gagccggacc cagcaggacg ggatatctcc atccgcccct tcctggagca ctgtgagaac acctatga ccacttggct tggcatcgtc tatgcctaca agggacttct catgttgttc ggttgttctc tagcttggga gacccgcaac gtcagcatcc ccgcactcaa cgacagcaag tacatcggtg tgagtgtcta caacttgggg atcatgtgca tcactggggc cgctgtctcc ttctgaccc gggaccagcc caatgtgcag ttctgcacgc tggctctggt catcatcttc tgcagcacca tcacctctg cctggtattc gtgccgaagc tcataccct gagaacaaac ccagatgcag caacgcagaa caggcgattc cagttcactc agaatcagaa gaaagaagat tctaaaacgt ccacctcggt caccagtgtg aaccaagcca gcacatcccc cctggagggc ctacagtcag aaaaacctcg cctgcgaatg aagatcacag agctggataa agacttgaa gaggtcacca tgcagctgca ggaacacca	Homo sapiens
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436	54053	Gaba (b) Receptor 2	NP_005449.1	<p>gaaaagacca cctacattaa acagaaccac taccagagc tcaatgacat cctcaacctg  gaaaacttca ctgagagcac agatggagga aaggccattt taaaaaatca cctcgatcaa  aatccccagc tacagtggaa cacaacagag cctctcgaa catgcaaga tccatagaa  gatataaact ctccagaaca catccagcgt cggctgtccc tccagctccc catctccac  cacgcctacc tccatccat cggagcgctg gagccagct gtgtcagccc ctgctcagc  ccacacgcca gccccgcca cagacatgtg ccaacctctt tccgagtcac ggtctcgggc  ctgtaa</p>	Homo sapiens
437	55728	ETL protein	NM_022159	<p>IMSPRRSQGP GRPPPPPPPP ARLLLLLLLP LLLPLAPGAW GWARGAPRPP PSSPPLSIMG P  LMPLTKEVAK GSIGRGVLP VELAIEQIRN ESLLRPYFLD LRLYDTECDN AKGLKAFYDA  IKYGNHLMV FGVCPSPVTS IIAESLQGNV LVQLSFAATT PVLADKKKYP YFFRTVPEDN  AVNPAILKLL KHYQWKRVGT LTQDVQRFSE VRNDLTGVLY GEDIEISDTE SFSNDPCTSV  KKLKGNDVRI ILQFDQDMA AKVFCCAYEE NMYGSKYQWI IPGWYEPSWW EQVHTEANSS  RCLRNLLAA MEGYIGVDFE PLSSKQIKTI SGKTPQOYER EYNNKRSVG PSKFHGYAYD  GIWVIKTLQ RAMETLHASS RHQRIQDFNY TDHTLGRILL NAMNETNFFG VTGQVVFNRG  ERMGTIKFTQ FQDSREVKVG EYNAVADTLE IINDTIRFQG SEPPKDKTII LEQLRKISLP  LYSILSALT I LGIMASAFI FFNIKRNQK LIXMSSPYMN NLIILGMLS YASIFLFGLD  GSFVSEKTFE TLCTVRTWIL TVGYTTAFGA MFAKTRVHA IFKNVKKKKK IIKDQKLLVI  VGGMLLIDL I LICWQAVDP LRRTVEKYSM EPDPAGRDIS IRPLLEHCEN THMTIWLGI  YAYKGLMLF GCFLAWETRN VSIPALNDSK YIGMSVYVNG IMCIIGAASV FLTRDQPNVQ  FCIVALVIF CSTITLCLVF VPKLITLRTN PDAQNPRF QFTQNKQKED SKTSTSSTSV  NQASTSRLEG LQSENHRLM KITELDKOLE EVTMQLQDTP EKTYYIKQNH YQELNDILNL  GNFTESTDGG KAILKNHLIQ NPQLQWNTTE PSRTCKDPIE DINSPEHIQR RLSLQLPILH  HAYLPSIGGV DASCVSPCVS PTASPRHRHV PPSFRVMVSG L</p>	Homo sapiens
437	55728	ETL protein	NM_022159	<p>gtgaaattta aactccagtc ctgtggcgaa aatgctaatt gcactaacac agaaggaagt A  tattattgta tgtgtgtacc tggcttcaga tccagcagta accaagacag gtttatcact  aatgatggaa ccgtctgtat agaaaatgtg aatgcaaaact gccatttaga taatgtctgt  atagctgcaa atattaataa aactttaaca aaatcagat ccataaaaga acctgtggct  ttgctacaag aagtctatag aaattctgtg acagatcttt caccaacaga tataattaca  tatatagaaa tattagtga atcatcttca ttactagggtt acaagaacaa cactatctca  gccaaggaca cctttcttaa ctcaactctt actgaatttg taaaaaccgt gaataatttt  gttcaaaagg atacatttgt agtttgggac aagttatctg tgaatcatag gagaacacat  cttacaanaac tcatgcacac tgttgaaaca gctactttaa ggatatccca gagcttccaa  aagaccacag agtttgatac aaattcaacg gatatactc tcaaaagtttt cttttttgat  tcataaaca tgaacatat tcatctctcat atgaatatgg atggagacta cataaataa  tttccaaaga gaaagctgc atagattca aatggcaatg ttgcagttgc atttttatat  tataagagta ttggtccttt gctttcatca tctgacaact tcttattgaa acctcaaaat  tatgataaatt ctgaagagga ggaagagtc atattctcag taatttcagt ctcaatgagc  tcaaacccac ccacattata tgaacttgaa aaataaacat ttacattag tcatcgaaag  gtcacagata ggtataggag tctatgtgca ttttgggaatt actcacctga taccatgaat  ggcagctggt ctccagaggg ctgtgagctg acatactcaa atgagaccca cacctcatgc  cgtgtaac acctgacaca ttttgcaatt ttgatgtctc ctggtccttc cattggtatt</p>	Homo sapiens

438	55728	ETL protein	NP_071442.1	MCVPGFRSSS NQDRFITNDG TVCIENVNAN CHLDNVCIAC NINKTLTKIR SIKEPVALLQ P	Homo sapiens
				EVYRNSVTDL SPFDIITYIE ILAESSLLG YKNNITISAKD TLSNSTLTFE VKTVNNEVQR	
				DTFVWDKLS VNHRRTHLTK LMHTVEQATL RISQSFQKTT EFDTNSTDIA LKVFFFDSYN	
				MKHIHPHNM DGDIINIFPK RKAAYDSNGN VAVAFLYYKS IGPLLSSDN FLLKPQNYDN	
				SEEEERVISS VISVSMSSNP PTLYELEKIT FTLSHRKVTD RYRSLCAFWN YSPDTMNGSW	
				SSEGCELTYS NETHTSCRN HLTHFAILMS SGPSIGIKDY NILTRITQLG IISLILCLAI	
				CIFTFFWFFSE IQSTRTHKH NLCCSLFLAE LVFLVGINTN TNKLFCSIIA GLLHYFFFLAA	
				FAWMCIEGIIH LYLIIVGVVY NKGFLHKNFY IFGYLSPAVV VGFSALGYR YGGTTKVCWL	
				STENNFIIWSE IGPACILILV NLLAFGVIIY KVFRTAGLKR PEVSCFENIR SCARGALALL	
				FLLGTTWIFG VLVHVHASW TAYLFTVNSA FQGMFIFLFL CVLSRKIQEE YYRLFKNVPC	
				CFGCLR	
439	56923	Muscarinic acetylcholine Receptor M3	NM_000740	atgaccttgc acaataacag tacaacctcg cctttgtttc caaacatcag ctccctctgg A	Homo sapiens
				atacacagcc cctccgatgc agggctgccc cgggaacccg tcaactattt cggcagctac	
				aatgtttctc gaggagctgg caatttctcc tctccagacg gtaccaccca tgacctctcg	
				ggaggtcata ccgtctggca agtggctctc atcgcttctc taacgggcat cctggccttg	
				gtgaccatca tcggcaacat cctggtaatt gtgtcatatta aggtcaacaa gcagctgaag	
				aaagattata atattcttac aaggatcact caactaggaa taattatttc actgatttgt	
				cttgccatat gcatttttac ctcttggttc ttcagtgaac tcaaaagcac caggacaaca	
				attcacaaaa atctttgctg tagcctattt cttgctgaac ttgtttttct tgttgggac	
				aatacaaaaa ctaataagct cttctgttca atcattgccg gactgctaca ctacttcttt	
				ttagctgctt ttgcatggat gtgcattgaa ggcatacatc tctatctcat tgttgggggt	
				gtcatctaca acaagggatt ttgacacaag aatttttata tctttggcta tctaagccca	
				gccgtggtag ttggattttc ggcagcacta ggatacacag attatggcac aaccaagta	
				tgttggctta gcaccgaaaa caactttatt tggagtttta taggaccagc atgcctaata	
				attcttggtta atctcttggc ttttgagtc atcatataca agttttttcg tcacactgca	
				gggttgaac cagaagttag ttgctttgag aacataaggt cttgtgcaag aggagccctc	
				gctcttctgt tcttctcgg caccacctgg atctttgggg ttctccatgt tgtgcacgca	
				tcagtggta cagcttacct cttcacagtc agcaatgctt tccaggggat gttcattttt	
				ttattcctgt gtgttttata tagaagatt caagaagaat attacagatt gttcaaaaat	
				gtccctgtt gttttggatg tttaaggtaa acatagagaa tgggtgataa ttacaactgc	
				acaaaaataa aaattccaag ctgtggatga ccaatgtata aaaaagactc atcaaatat	
				ccaattatta actactagac aaaaagtatt ttaaatcagt ttttctgttt atgctatagg	
				aactgtagat aataaggtaa aattatgtat catatagata tactatgttt tctatgtga	
				aatagttctg tcaaaaaatag tattgcagat atttggaaaag taattgggtt ctcaggagt	
				atatcactgc accaaaggaa agattttctt tctaacacga gaagtatatg aatgtcctga	
				aggaaaccac tggcttgata tttctgtgac tctgtgtgac tttgaaaacta gtccctacc	
				acctcggtaa tgagctccat tacagaaaagt ggaacataag agaatgaagg ggcagaatat	
				caaacagtga aaagggaatg ataagatgta ttttgaatga actgtttttt ctgtagacta	
				gtgagaaaat tgtgacata aaataaagaa ttgagaacac acattttacc attttgtgaa	
				ttgttctgaa cttaaatgtc cactaaaaca acttagactt ctgtttgcta aatctgtttc	
				tttttctaatt attctaataa	

440	56923	Muscarinic acetylcholin e Receptor M3	NP_000731.1	<p>acggtcaaca actacttctt cttaagcctg gctgtgccc atctgattat cggggtcatt  tcaatgaatc tgtttacgac ctacatcac atgaatcgat gggccttagg gaactggcc  tgtacctct ggcttgccat tgactacgta gccagcaatg cctctgttat gaacttctg  gtcatcagct ttgacagata cttttccatc acgaggccgc tcaagtagcc agccaaacga  acaacaaaaga gagccggtgt gatgatcgtt ctggcttggg tcatctctt tgctcttgg  gctcctgcca tcttgctctg gcaatacttt gttgaaaaga gaactgtgcc tccgggagag  tgcttcattc agttcctcag tgagcccacc attacttttg gcacagccat cgctgctttt  tatatgctg tcaccattat gactatttta tactggagga tctataagga aactgaaaag  cgtaccaaaag agcttgctgg cctgcaagcc tctgggacag aggcagagac agaaaacttt  gtccacccca cgggcagttc tcgaagctgc agcagttacg aacttcaaca gcaagcatg  aaacgctcca acaggaggaa gtatggccgc tgcacttctt ggttcaaac caagagctgg  aaacccagct ccgagcagat ggaccaagac cacagcagca gtgacagttg gaacaacaat  gatgctgctg cctccctgga gaactccgac tctccgagc aggaggacat tggctccgag  acgagagcca tctactccat cgtgctcaag ctccgggtc acagcaccat cctcaactcc  accaagtac cctcatcgga caacctgcag gtgctgagg aggagctggg gatggtggac  ttggagagga aagccgacaa gctgcaggcc cagaagagcg tggacgatgg aggcagttt  ccaaaaagct tctccaaagt tcccatccag cttagagtcag ccgtggacac agctaagact  tctgacgtca actcctcagt gggtaagagc acggccactc tacctctgtc cttcaaggaa  gccactctg ccaagaggtt tgctctgaag accagaagtc agatcactaa gcggaaaagg  atgtccctgg tcaaggagaa gaaagcggcc cagaccctca gtgcatctt tctgccttc  atcatcactt ggaccccata caacatcatg gttctgttga acacctttg tgacagctgc  atacccaaaa ccttttgaa tctgggctac tggctgtgct acatcaacag caccgtgaac  cccgtgtgct atgtctctg caacaaaaa ttcagaacca ctttcaagat gctgctgctg  tgccagtg acaaaaaaa gaggcgcaag cagcagtacc agcagagaca gtccgtcatt  tttcacaag cgccaccga gcaggccttg tag</p>	Homo sapiens
441	57180	Leukotriene B4 Receptor BLTR2	NM_019839	<p>GGHTVWQVVF IAFITGILAL VTIIGNILVI VSFKNVQLK TVNNYFLLSL ACADLIIGVI  SMNLFITYII MNRWALGNLA CDLWLAIIDYV ASNASVMNLL VISFDRYFSI TRPLTYRAKR  TTKRAGVMIG LAWVISFVLW APAILFWQYF VGKRTVPPGE CFIQFLSEPT ITFGTAAAF  YMPVTIMTIL YWRIYKETE KTELKLAGLQA SGTEAETENF VHPTGSSRSC SSYELQQOSM  KRSNRRKYGR CHEWFTTKSW KPSSEQMDQD HSSSDSWNNN DAAASLENSA SSDEEDIGSE  TRAIYSIVLK LPHSTIILNS TKLPSSDNLQ VPEELGMVD LERKADKLQA QKSVDDGGSF  PKSFKLPIQ LESAVDTAKT SDVNSSVGKS TATPLSFKE ATLAKREALK TRSQITKRKR  MSLVKEKAA QTLSAILLAF IITWTPYNIM VLNTFPCDSC IPKTFWNLGY WLCYINSTVN  PVCYALCNKT FRTFKMLLL CQCDKKRRK QYQQRQSVI FHKRAPEQAL</p>	Homo sapiens

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442	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	MAPSHRASQV GFCPTPERPL WRLPPTCRPR RMSVCYRPPG NETLLSWKTS RATGTAFLLL P AALLGLPENG FVWVSLAGWR PARGRPLAAT LVHLALADG AVLLLTPLFV AFLTRQAWPL GQAGCKAVYV VCALSMYASV LITGLLSLQR CLAVTRPFLA PRLRSPALAR RLLLAWLAA LLIAPPAVY RHLWRDRVCQ LCHPSPVHAA AHLSELTITA FVLPFGMLG CYSVTILARL GARWGSGRHG ARVGRILVSAI VLAFLGLWAP YHAVNLIQAV AALAPPEGAL AKLGGAGQAA RAGTTALAFF SSSVNPVLVY FTAGDLLPRA GPRFLRLIFE GSGEARGGGR SREGTMELRT TPQLKVVGQG RGNQDPGGGM EKDGPEWDL	Homo sapiens
443	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flam ingo)	NM_014246	atggcgccgc cgcgcgcgc cgtgtgtccc gtgtgtgtgc tctgtgtgtgc cgcgcgcgcgc A ctgcgcgcga tggggctgtgc agcgccgcgc tggagaccgc gcgtaccgcgc cgggaccgcgc gccttgcgcc tccggccgcgc ctgtacctac cgtgtgtgtgc cgcgtgtgtgc gccccgggcgc ccgcgggagc tgcgtgacgt gggccgcgat gggcggtgtgc caggacgtgc gcgcgtctgc ggcgcggggc gcccgtgcc gcccgtgcc gctgcaagtc cgttgggtgc cccgcagtcg cccgcagcgc ctgagccgcc gctgtgtgtgc gctgtgtgtgc cttccgcgc cttccgcgcgc tgcgcgcgcgc tgcggaaccg gtgcgcgcgc ctgtgtgtgtgc cttgtgtgtgc cgttccccgc cgtgtgtgtgc gcccgcgcgc attcgcgcgc cgcagcttcc accacttac cgcctgtgtgc ctgcgcgcgc cgcgcgcgcgc cccgtgttcc cgcgcgcgcgc atctgtgtgc cgcgcgcgcgc ctcggtgtgc ctgcgtctgc tgtgtgtgtgc ggcgcgcgcgc gctgtgtgtgc tccgggtgtgc actgtgtgtgc gagccgcgcgc cgcgcgcgcgc gcccctgcgc tgcgcgcgcgc catgcgcgcgc cctgtgtgtgc aacttgccgc agccgcgcgc gggcggcgcgc cgcgcgcgcgc ggcgcgcgcgc gagcggcgcgc gggagcctga agtttccgat gcccaactac caggtgtgtgc tgtttgagaa cgaacgcgcgc ggcaccctca tcttccagct gcacgcgcgc tacaccatgc aggcgcgcgc gagcggcgcgc agctattaca tggaggggtc gtgcgcgcgc gctgtgtgtgc gctgtgtgtgc gctgtgtgtgc gccacgggcgc cgtgtgtgtgc ggcgcgcgcgc ctgtgtgtgc agacaaagga gacgcgcgcgc ctcaggggtga agccgtgtga ctacagtacg cgcgcgcgcgc cgcgcgcgcgc ctacatcact gtctgtgtga agacacacaa cgcgcgcgcgc cgcgcgcgcgc agcagtcgcgc gtaccgcgcgc cgcgtgtgtgc agaacctgtga ggtgtgtgtgc gagggtgtgc ccatccgcgc cagcgaccgc gactgcgcgc tcaacgcgcgc cttgtgtgtgc cgcgtgtgtgc ggcgcgcgcgc ggacgtcttc cagctcaacg agagctctgt cgtgtgtgtgc acacgggcgc tgcgtgtgtgc ggaggggcgc gccgagtagc agctcctgtgt ggcgcgcgcgc gacacgggcgc gcaatccgcgc cccgtcagc gccacgggcgc cgtgtgtgtgc cgcgcgcgcgc gacgcgcgcgc acaactacc cagttcagc gagcagaact acgtgtgtgc ggtgtgtgtgc gacgtgtgtgc tcaacacgcgc tgtgtgtgcgc gtgcaggcca cgcgcgcgcgc cgcgcgcgcgc cgcgcgcgcgc ttcactacag catcctcagc gggaacgtgt cgcgcgcgcgc ctacctgcac tgcgtgtgtgc ggcgcgcgcgc tgtgtgtgtgc cccttgatt tgcagagatgt ccagaaatgc tgcgtgtgtgc ttaaggccca ggcgcgcgcgc cgcgcgcgcgc tcatcaatgc ttcaggggtgt ggtgtgtgtgc aggtgtgtgc tgtcaacgcgc aacgagccta tcttgtgtgc cgcgcgcgcgc cgcgcgcgcgc tgcgtgtgtgc tgtgtgtgtgc ggctaccccc tgcgtgtgtgc tgcaggggtgt gacgcgcgcgc ctggagagaa cgcgcgcgcgc cactatgcgc tgcgtgtgtgc ggcctccacc tttctgtgtgc ggcgcgcgcgc tgggcctaaag aatcctgccc ccacccccga cttcccttgc cagatccaca acagctcgcgc ttggatcaca gtgtgtgtgc agctgtgtgc cgcgcgcgcgc ggcgcgcgcgc gcttccgggt ggagggcgcgc gaccacggct cgcgcgcgcgc ggcgcgcgcgc accagcgtgt ccatcacgcgc gctgtgtgtgc	Homo sapiens

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cacaaggctc ttggttctc caggagtca gggcctgtca gacctgtga caagtgcaa  
aggccacagg catgaggag gcgtggacca ctgggccag accgtgagt cctaagactg  
cagtcaaac cagaactg aggggaccc agactgggc cagaggctg ccagagttca  
ggaacgcgg gcacagacca aagaccggg tccagcccc ccaggcggg catctcatg



444	73584	Cadherin EGF NP_055061.1 LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flam ingo)	<p>cagtgcggac ccgtggctgg cagcccgccg agtcccttgc aaaggcacc cttgtcttaa aatcaactcg ctatgtggga aaggtggaga tactttata tatttgtatg ggactctgag gaggtgcaac ctgtatatat attgcattcg tgtgactttt gttatcccca gagatccatg caatgatctc ttgtgtcttt ctctgtcaag attgcacagt tgtacttgaa tctggcatgt gttgacgaaa ctggtgcccc agcagatcaa aggtgggaaa tacgtcagca gtggggctaa aaccagcgg ctagaagccc tacagctgcc ttccggccagg aagtggagat ggtgtgggcc ctcccgccg gccccctggg tcccagtggt tcgctgtgtg tgcgtttgtc ctctgtgcc atctgcccc gctgtgtgaa ttcaagacag ggcacgtgag cactaggcag gtgtgaggag ccctgctgag gtcactgtgg ggcacgtgttgc ccacacggtt gtcatttttc acctggtcac tctgtgacca ccacccctc cctcaccgc ctcccaggtg gcccgggagc tgcaggtggg gatggctttg tcctttgtct ctgctcccc ctggaccctgg gacctaaaag cgttgccagt tcctgatttg gacagaggtg tggggccttc caggccgtta catactcct gccaatctc taactctctg agactgcgag gatctccagg cagggttctc cctctggag tctgaccaat tacttcattt tgcttcaaat ggcacattgt gcagagggac aaagccacag ccacactctt caacggttac caaacgtgtt ttggaaattc acaccaaggt cgggccact gcaggcagct ggcacagcgt ggcccgaggg gctgtggaac ggtccccga actgcagac atgtttgatt ttagcgttc cttgttctt caaatcaggt gcccaataa gtgacagca cagctgcttc caaataggag aaaccataaa ataggatgaa aatcaagtaa aatgcaaga tgtccacact gttttaact tgaccctgat gaaaatgtga gcactgttag cagatgctta tgggagagga aaagcgtatc tgaaaatggt ccaggacagg aggatgaaat gagatccag agtccctaca cctgaatgaa ttatacatgt gccctaccag gctgagtgtc ttccgaagat aaaaaactct agtcccttta acggtttg ccctggcgtt cctaagtacg aaaaggtttt taagtcttcg aacagtctcc ttctatgact ttaacaggat tctgccccct gaggtgtaat tttttgttc tattttttc cagctactcc acagccaaca tcacgaggtg taatttttaa tttgatcaga actgttacca aaaaacaact gtcagtttta ttgagatggg aaaaatgtaa acctatttt attacttaag actttatggg agagattaga cactggaggt ttttaacaga acgtgtattt attaatgttc aaacactgg aattacaaaat gagaagagtc tacaataaat taagattttt gaattgttac ttctgcggtg ctggttttcc tcacaaaaa cccccccc tccccatgcc caggttgccc gtggaaggga cgggttacgg acgtgcagct gagctgtccg tgtcccatgc tcctcagcc agtggaaact gccgaaact ttgtccatt cctagtagg cctgccacag cctagatggg cagtttttgt ctttccaaa atttgaggac tttttttt tgccattatt tcttcagttt tctttcttg cactgatctt tctcctcc tctgtgact ccagtgactc agacgttaga cctcttgatg ttttccact ggtccctgag gctctgttc</p> <p>MAPPPPPVLP VLLLLAAAA LPAMGLRAAA WEPVPGGTR AFALRPGCTY AVGAACTPRA P PRELLDVGRD GRLAGRRVS GAGRLPLQV RLVARSAFTA LSRLRARTH LPCCGARARL CGTGARLCGA ICFVPGCCA AAQHSALAAP TTLACRCPP RPRPCGRP ICLPPGGSVR LRLCALRAA AGAVRVGLAL EATAGTPSA SPSPSPPLPP NLPEARAGPA RRARRGTSR GSLKFPMPNY QVALFENEPALDRETKETHV LRKAVDYST PPSATTYIT VLKDTNDHS RSRGYFRIDS ATGAVSTDSV EVLTIRASDR DSPINANLRY RVLGAWDFV QLNESGWVS TRAVLDREEA RVRENLEVG EVLTIRASDR DSPINANLRY RVLGAWDFV QLNESGWVS TRAVLDREEA AEYQLLVEAN DQGRNPGPLS ATATVYIEVE DENDNYPQFS EQNYVVQVPE DVGLNTAVLR</p>	Homo sapiens
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VQATDRDQGG NAAIHYSILS GNVAGQFYLH SLSGILDVIN PLDFEDVQKY SLSIKAQDGG  
RPPLINSSGV VSVQVLDVND NEPIFVSSPF QATVLENVPL GYPVVHIAQV DADSGENARL  
HYRLVDAST FLGGSGAGPK NPAPTDPDFP QIHNSGWT VCAELDREEV EHYSGVEAV  
DHGSPMSSS TSVSITVLDV NNDNPFVFTQ TYELRLNEDA AVGSSVLTQ ARDRDANSVI  
TYQLTGGNTR NREFALSSQRG GGLITLALPL DYKQEQQYVL AVTASDGTRS HTAHLVINVT  
DANTHRPVFQ SSHYTVSVSE DRPVGTSIAT LSANDEDTGE NARITYVIQD PVPQFRIDPD  
SGTMYTMEL DYENQVAYTL TIMAQDNGIP OKSDTTTLEI LILDANDNAP QFLWDFYQGS  
IFEDAPPSTS ILQVSATDRD SGNRGRLLYT FQGGDDGDGD FYEFTSGVI RTQRRLDREN  
VAVYNLWALA VDRGSPTPLS ASVEIQVTIL DINDNAPMFE KDELEFVEE NNPGSVVAK  
IRANDPDEGP NAQIMYQIVE GDMRHHFFQLD LINGDLRAMV ELDFEVREY VLVVQATSAP  
LVSRATVHIL LVDQNDNPPV LPDFQILENN YVTNKSNSFP TGVIGCIPAH DPDVSDSLNY  
TFVQGNELRL LILDPATGEL QLSRDLNDR PLEALMEVSF SDGHSVTAF CTRVTIITD  
DMLTNSITVR LENMSQEKFL SPLALFVEG VAAVLSTTKD DVEFENVQND TDVSSNINLV  
TFSALLPGGV RGQFFPSED L QEIYLNRTL LTTISTQRL PFDDNICLRE PCENYMKCVS  
VLREDSSAPF LSSTTVLFRP IHPINGLR CR CPPGFTGDC ETEIDLCYSD PCGANGRCRS  
REGGYTCECF EDTGHECEV DARSGRANG VCKNGGTCVN LLIIGGFHCVC PPGEYERPYC  
EVTTRSFPFQ SEVTFERGLRQ RHFTISLTF ATQERNGLLL YNGRFNEKHD FIALEIVDEQ  
VQLTFSAGET TTTVAPKVPS GVSDGRWHSV QVQYXNKPNI GHGLPHGPS GEKMAVVTVD  
DCDITMAVRF GKDIGNYSCA AQGTGTGSKK SLDLTGPLL GGVPNLPEF PVHNRQFVGC  
MRNLSDVGKN VDMAGFIANN GTREGCAARR NFDGRRCCN GGTCVNRWNN YLCECPLRFG  
GKNCQAMPH POLFSGESV SWSDLNIIIS VPWYGLMFR TRKEDSVLME ATSGGPTSEF  
LQILNNYLOF EVSHGPSDE SVMLSLGRVT DGEWHLLIE LKNVKEDSEM KHLVTMTLDY  
GMDQNKADIG GMLPGLTVRS VVVGASEDK VSVRRGFRGC MQGVRMGGTP TNVATLNMNN  
ALKVRVKDGC DVDDPCTSSP CPPNSRGCHA WEDYSCVCDK GYLGINCVDA CHLNPENMG  
ACVRSPPSPQ GYVCEGFSH YGPYCNKLD LPCPRGWGN PVCGPCHCAV SKGFDPCNK  
TNGQCQCKEN YYKLLAQDTC LPCDCFPHS HSRTCMTATG QCACKPGVIG RQCNRCNDPF  
AEVTILGCEV IYNGCPKAFE AGIWPQTKF GQPAAVPCPK GSVGNVAVRHC SGEKGWLPPE  
LFNCTTISFV DLRAMNEKLS RNETQVDGAR ALQLVRALRS ATQHTGTLEG NDVRTAYQLL  
GHVLQHSWQ QGFDLAATQD ADFHEDVIHS GSALLAPATR AAWEQIORSE GGTAQLLRRL  
EGYFSNVARN VRRTYLRPFV IVTANMILAV DIFDKFNFTG ARVPRFTIH EEFPRELESS  
VSFPADFFRP PEEKEGPLL R PAGRRTPQT TRPGPGTERE APISRRRRHP DDAGQFAVAL  
VIIYRTLGQL LPERYDPRR SLRLPHRPII NTPMVSTLVY SEGAPLPRPL ERPVLVEFAL  
LEVEERTKV CVFWNHS LAV GGTGWSARG CELLSNRTH VACQCSHTAS FAVLMDISRR  
ENGEVLPLKI VTAAVSLSL AALLVAFVLL SILVRMLRSNL HSIHKLAVA LFLSQLVFI  
GINQENPFL CTWVAILLHY IYMSTFAWTL VESLHVYRML TEVRNIDTGP MRFYVVGWG  
IPAIVTGLAV GLDPQGYGNP DFCWLSLQDT LIWSFAGPIG AVIIINTVTS VLSAKVSCQR  
KHYYGKGI VSLRTAFLL LLLISATWLL GLLA VNRDAL SFHYLFAIFS GLQGFVLLF  
HCVLNQEVK HLKGVLGGRK LHLEDSATTR ATLITRSINC NTFDGDGPD LRTDLGESTA  
SLDSIVRDEG IQKIGVSSGL VRGSHGEPDA SIMPRSCKDP PGHDSDDSE LSLDEQSSY  
ASSHSSDSED DVGAEKWD PARGAVHSTP KGDVAVNHVP AGWPDQSLAE SDEDFSGKP  
RLKVETKVS ELHREEQGS RGEYPPDQES GGAARLASSQ PPEQRKGILK NKVTYPPPLT

Accession	Gene	Protein	Species	Sequence
445	74514	5-HT5A Receptor	Homo sapiens	LTEQTLKGRLLREKLADCEQSPTSSRTSSLSGGPDCAITVKSPGPREGRDLHNGVAMNVR TGSAQADGSDSEKP atggaatttac cagtgaacact aacctctctt tccctctcca cccctctccc ttggagagacc A aaccacagcc tcggcaaaaga cgacctgcgc cccagctcgc cctgtctctc ggtcttcgga gtgcttattc tcacctgtgt gggctttctg gtggcgccga cgttcgctg gaacctgctg gtgctggcga ccatctctcg tgaacgcacc ttccacccgc tgcgcccaa cctggtggca tccatggccg tctcgatgt cctggtggcc ggcgtggtca tgcgctgag cctggtgcat gagctgctcg ggcgcgctg gcagctaggt cggagggtgt gccagctttg gatcgctgc gagctgttt gctgcacggc cagcatctgg aacgtgacgg ccatagccct ggaccgctac tggctccatca cgcgccacat ggaatacacg ctcgcaccc gcaagtgcgt ctccaaacgtc atgctgcgc tcaactgggc actctcgcgt gtcactctc tggcccgct gcttttggc tggggagaga cgtactctga gggcagcag gagtgcagg taagcgcga gccctctac gccgtgtct ccaccgtagg cgcctctac ctgcgctct gtgtggtgt cttogtgtac tgggaagatct acaaggctgc caagtccgc gtgggtctca ggaagaccaa tagcgtctca cccatatccg aagctgtgga ggtgaaggac tctgcaaac agccccagat ggtgttcacg gtccgccacg ccacgtcac ctccagcca gaaggagaca cgtggcgga gcagaaggag cagcgggcg cctcatggt ggcctctc attggtgtgt tctgtctctg ctggatcccc ttctttctca cgcagctcat cagtcctc ctactcctc tgcctctgt acatccccg catctggaaa agcatctctc tgtggtgtg cgcctcaag acctctttt ctaggcaaca ctatacggct tccaacaaga actacaacag cgcctcaag acctctttt ctaggcaaca ctatacggct MDLPVNLTSF SLSTPSPLET NBSLKGDDLR PSSPLLSVFG VLILTLGLF VAATFAWNL P VLATILRVTR FHRVPHNLVA SMAVSDVIVA ALVMPLSLVH ELSGRWQLG RRLQLWIAC DVLICSTASIW NVTALDRY WSITRHEMT LRTRKCVSNV MIALTWALSA VISLAPLLFG WGETYSEGSE ECQVSREPSY AVFSTVGAFY LPLCVLFVY WKIYKAKFR VGSRTNSVS PISEAVEVKD SAKQPMVFT VRHATVTFQP EGDWREKQE QRAALMVGIL IGVFLCWIP FFLTELISPL CSCDIPAIWK SIFLWLGYSN SFENPLIYTA FNKNYNSAFK NFFSRQH gtaatgcaga gataataaaa cttcttaggt ccataggtct tataataatt taataaccta A aacatggtat acaaatctct ccaaacccaa taacataatt atagtttcaa aaagttcccc aaactttcaa gttagattt attgctttga tgagtggctt taaatatgaa aagttctgcc tgtgaagggc aatcctttt ccgtggactg ggtctatag aaatacagaa atgtgcccag gggtctatct cctaataac catcattcac attctcaac ctccctaata accagccacc atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactggt cagtgaggtt ggtgcaacc tgatgctaag gatgtcaaa ttgtctggc cttgttctcc agccagtaag taattcctg gctcgggcc ataccctca atcttggtca gctgattatg acaggcagac agcacagtaa ataacactat atattaagaa acccaagc atatgtatca atggtatata ccaacagca tctaggaat ggaggtctg tagcaaggcc ctccaatgtg aaggtcaaca cagtcactgt gatcggtga ttctcattt gtaaaagatg atctctggtg gtcattttta tcttctaac ttattgaaa agtctcctgt ttgtggggcc cgccctggtg cacagccaga ctgactcagt ttccctggga ggtcccgctc gagcccgctc ttccctccc tctgcccccc cccagccctc gcccaacct cggcgcccg acatctgct gctcagctcc agacggcgcc cggaccccc ggcggggat ccagccaggt gggagcccc cagatgaggt
446	74514	5-HT5A Receptor	Homo sapiens	NP_076917.1 MDLPVNLTSF SLSTPSPLET NBSLKGDDLR PSSPLLSVFG VLILTLGLF VAATFAWNL P VLATILRVTR FHRVPHNLVA SMAVSDVIVA ALVMPLSLVH ELSGRWQLG RRLQLWIAC DVLICSTASIW NVTALDRY WSITRHEMT LRTRKCVSNV MIALTWALSA VISLAPLLFG WGETYSEGSE ECQVSREPSY AVFSTVGAFY LPLCVLFVY WKIYKAKFR VGSRTNSVS PISEAVEVKD SAKQPMVFT VRHATVTFQP EGDWREKQE QRAALMVGIL IGVFLCWIP FFLTELISPL CSCDIPAIWK SIFLWLGYSN SFENPLIYTA FNKNYNSAFK NFFSRQH gtaatgcaga gataataaaa cttcttaggt ccataggtct tataataatt taataaccta A aacatggtat acaaatctct ccaaacccaa taacataatt atagtttcaa aaagttcccc aaactttcaa gttagattt attgctttga tgagtggctt taaatatgaa aagttctgcc tgtgaagggc aatcctttt ccgtggactg ggtctatag aaatacagaa atgtgcccag gggtctatct cctaataac catcattcac attctcaac ctccctaata accagccacc atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactggt cagtgaggtt ggtgcaacc tgatgctaag gatgtcaaa ttgtctggc cttgttctcc agccagtaag taattcctg gctcgggcc ataccctca atcttggtca gctgattatg acaggcagac agcacagtaa ataacactat atattaagaa acccaagc atatgtatca atggtatata ccaacagca tctaggaat ggaggtctg tagcaaggcc ctccaatgtg aaggtcaaca cagtcactgt gatcggtga ttctcattt gtaaaagatg atctctggtg gtcattttta tcttctaac ttattgaaa agtctcctgt ttgtggggcc cgccctggtg cacagccaga ctgactcagt ttccctggga ggtcccgctc gagcccgctc ttccctccc tctgcccccc cccagccctc gcccaacct cggcgcccg acatctgct gctcagctcc agacggcgcc cggaccccc ggcggggat ccagccaggt gggagcccc cagatgaggt
447	81765	Thromboxane A2 Receptor	Homo sapiens	NM_001060 gtaatgcaga gataataaaa cttcttaggt ccataggtct tataataatt taataaccta A aacatggtat acaaatctct ccaaacccaa taacataatt atagtttcaa aaagttcccc aaactttcaa gttagattt attgctttga tgagtggctt taaatatgaa aagttctgcc tgtgaagggc aatcctttt ccgtggactg ggtctatag aaatacagaa atgtgcccag gggtctatct cctaataac catcattcac attctcaac ctccctaata accagccacc atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactggt cagtgaggtt ggtgcaacc tgatgctaag gatgtcaaa ttgtctggc cttgttctcc agccagtaag taattcctg gctcgggcc ataccctca atcttggtca gctgattatg acaggcagac agcacagtaa ataacactat atattaagaa acccaagc atatgtatca atggtatata ccaacagca tctaggaat ggaggtctg tagcaaggcc ctccaatgtg aaggtcaaca cagtcactgt gatcggtga ttctcattt gtaaaagatg atctctggtg gtcattttta tcttctaac ttattgaaa agtctcctgt ttgtggggcc cgccctggtg cacagccaga ctgactcagt ttccctggga ggtcccgctc gagcccgctc ttccctccc tctgcccccc cccagccctc gcccaacct cggcgcccg acatctgct gctcagctcc agacggcgcc cggaccccc ggcggggat ccagccaggt gggagcccc cagatgaggt

448	81765	Thromboxane A2 Receptor	NP_001051.1	<p> ctctgaaggt gtgcctgaac cagtgccagc ctgcccctgtc tgcagcatcg gcctgatggg  gtggtgactg atccctcagg gctccggagc catgtggccc aacggcagtt ccctggggcc  ctgtttcccg ccacaaaaca ttaccctgga ggagagacgg ctgatacgctt cgccctgggt  cgccgctcc ttctgctgg tgggctggc ctccaaacctg ctggccctga gctgctggc  ggcgcgcgcg cagggggggtt cgcacacggc ctctctcttc ctacatttcc tctgcggcct  cgctctcacc gacttctctgg gctgctggt gaccgggtacc atcgtggtgt cccagcacgc  cgcgctcttc gagtggcacg ccgtggaccc tggctgcgt ctctgtcgt tcatgggctg  cgatcatgat ttcttcggcc tgtcccgtt gctgctggg gccgccatgg cctcagagcg  ctacctgggt atcacccggc ccttctcgcg ccggcggtc gctgcagc gccgcgctg  ggccaccgtg gggctggtgt gggcgggcgc gctggcgctg ggcctgctgc ccctgctggg  cgtgggtcgc tacacctgc aataccggg gtccctgtgc ttccctgacg tggcgccga  gtccggggac gtggccttcg ggtgctctt ctccatgctg ggcgccctct cggctcgggt  gtccttctcg ctgaacacgg tcagcgtggc caccctgtgc cagctctacc acgggcagga  ggcgccccag cagctcccc gggactccga ggtggagatg atggctcagc tccctgggat  catggtggtg gccagctgt gttggctgct ccttctggct ttcatggccc agacagtgt  gcgaacaccc cctgccaatg gcccgccgg gcagctgtcc cgcaccacgg agaaggagct  gctcatctac ttgcgctgg ccacctggaa ccagatcctg gaccctggg tgtatctct  gttcgcccgc gccgtgctc ggcgtctcca gctcgcctc agcacccggc ccaggtcgt  gtccctccag cccagctca cgcagcgtc cgggctgag taggaagtgg acagagcgcc  cctcccgcc cttcccgcg agccttggc cctcggaca gccatctgc ctggtctgag  gattcagggg gtgggggtgc tggatggaca gtggcatca gcagcagggt tttgggttga  cccaatcca accggggac ccccaatcc tccctgtacc ttttaccagg cactctccct  tcccgccc ctttttcca tccagagctc ccacccttc tctgcgtccc tcccaacccc  aggaaggcca tgcagacatt ggaagagggt cttgcatgct tattttttt tttagacgga  gtcttgctct gtcccccagg ctggagtga gtggcgcaat ctacgtcac tgcacactcc  acctccggg tcaagcgtat tctcctgct cagcctcctg agtagctggg actataggcg  cgcgccacca cgcccggtat atttttgtat ttttagtaga gacggggttt caccgtgtg  gccaggctgg tcttgaactc ctgacctcag gtgattcacc agcctcagcc tcccaaatg  ctgggatcac aggcataaac caccacacct ggccattttt ttttttttt tagacggagt  ctcactctgt gcccagcct ggagtacagt ggcacgatct cggctcactg caactccgc  ctccgggt caagcattc tctgctcctc gctcccgag cagctgggat tacaggcgta  agccactgog cccggccttg catgctcttt gaccctgaat ttgacctact tgcctgggta  cagttgcttc cttttgaacc tccaacaggg aaggctctgt ccagaaagga ttgaatgtga  aacgggggca ccccttttc ttgcaaaaat atatctctgc ctttggtttt at  </p>	<p> Homo sapiens  P  GARQGSHTR P  SNLLALSVA  GRLCRFMGV VMIFFGLSPL  IALGLLPLLG VGRYTVQYPG  TICHHVHGQE AAQQRPRDSE  SFLINTVSVA QLSTRTEKEL LIYLRVATWN  RNPSPAMPAG  SLQPQLTQRS GLQ  PRLSTRPRSL  LLVFIATQTVL  MVAASVCWLP  SGDVAFGLLF  YLGITRPFPSR  PVAASORRAW  TGTIVVSQHA  ALFEWHAADP  AASFVCWVGLA  </p>
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449	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	(C NP_005283	atggagtcct caggcaacc agagagcacc acctttttt actatgacct tcagagccag A ccgtgtgaga accaggcctg ggtctttgtt accctcgcca ccaactgtctt gtactgcctg gtgtttctcc tcagcctagt gggcaacagc ctggtcctgt ggtccttggg gaagtatgag agcctggagt ccccaaccaa catcttcac ctaaacctgt gctctcaga cctggtgttc gctgcttgt tgctgtgtg gatctccca taccactggg gctgggtgct gggagacttc ctctgcaaac tcctcaatat gatctctcc atcagcctct acagcagcat ctcttctctg accatcatga ccatccacg ctactgtcg gtagtggcc cctctccac cctgctgctc ccacccctcc gctgccgggt gctgtgacc atggtgtgt ggttagccag cactctgtcc tcacatctcg acaccatctt ccacaagggt ctttcttctg gctgtgatta ttccgaactc acgtgggtacc tcacctcgt ctaccagcac aacctcttct tctgtctgc cctggggatt atctgttct gctacgtga gatctcagg acctgttcc gctcacgctc caagcggcgc caccgcagg tcaagctcat ctctgccatc gtgtggcct acttctcag ctgggggtccc tacaacttca cctgtttct gcagacgtg ttctggacc agatcaccg gagctgctgag gccaaacagc agctagaata cgcctgtct atctgcccga acctgctt ctcccactgc tgctttaacc cgggtgctca tgtctctgt ggggtcaagt tccgcacaca cctgaacat gttctccggc agttctggt ctgccgctg caggcaccca gccagcctc gatccccac tccccctgtg ccttcgcta tgaggcgcc tcttctact ga 450	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	(C NP_005274.1	MESSGNPEST TFFYDLSQ PCENQAWFA TLATTVLYCL VLLSLVGN LVLWLVKYE P SLESNTNIFI INCLSDLVF ACLLPVWISP YHWGVGLGDF LCKLINMIFS ISLYSSIFFL TIMTHRYLS VVSPSLRLV PTLRCRVLVT MAVWVASILS SILDTIFHKV LSSGCDYSEL TWYLTSVYQH NFLLSLGI ILFCYVEILR TLFRRSKRR HRTVKLIFAI VVAYFLSWGP YNFTLFQLTL RFTQIIRSC AKQOLEYALL ICRNLAFSHC CFNPVLYFV GVKFRTHLKH VLRQFWFCRL QAPSPASIPH SPGAFAYEGA SFY 451	130108	G Protein-Coupled Receptor GPR75	(NM_006794	gcgatggcga tgatgcctct agtctgcat catccagagc ggcaggcgag ctgggtctcg A gactgcgaga tggaggagg ggcgctgcg gcacccggca ggcttatctg tcttgggctt cttttctcac atattgctca tctgtgagct gaggccctga ctcaactagt atttttgggg agcagaagaa ggagacattt ctctcgaata atgaactcaa caggccacct tcaggatgcc cccaatgcca cctcgctcca tgtgctcac ccacacagcc acctgggtga cctgtacttt tctactggcg gagggtcttc agtatctcat ccatgggttc ctatggcaac ttcatgtgtc tctgtctctt cttegatcca gtcatcttct gcctgggttc caactttgat tcatgatcc tgaacctgtc cttctgtgac gccttcagga aattcagaac agccccatg ttcaaccttg tgttattctt cagctcagcc ctcttcattt gtggagtgc agccccatg ttcaaccttg ttttattctt cagctcagcc agtagtatcc cggatgcttt ctgcttcaact ttcaacttca ccagttcagg cttcatcatc atgtctctga agacagtggc agtgatcgcc ctgcaccggc tccggatggt gttggggaaa cagcctaacc gcacggcctc ctttccctgc accgtactcc tcacctgct tctctgggccc accagtttca ccttgccac cttggctacc ttgaaaacca gcaagtccca cctctgtctt cccatgtcca gtctgattgc tggaaaagg aaagccattt tgtctctcta tgtgtctgac ttcaccttct gtgtgtctgt ggtctctgtc tcttaccatca tgattgtcga gacctgcgg aagaacgctc aagtcagaaa gtgccccctt gtaatacacag tcgatgcttc cagaccacag cctttcatgg ggtccctgt gcaggagggt ggagatccca tccagtgtgc catgccggt ctgtatagga accagaatta caacaaactc cagcacgttc agaccgttg atataccaag
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Homo sapiens

Homo sapiens

Homo sapiens

452	130108 G Protein- Coupled Receptor GPR75	NP_006785.1	<p>           agtcccaacc aactggtcac cctgcagca agccgactcc agctcgtatc agccatcaac            ctctccactg ccaaggattc caaagccgtg gtcacactgtg tgatactgtg gctgtcagtc            ctggtgtgct gtctccact ggggatttcc ttggtacagg tgggtctctc cagcaatggg            agcttcattc ttaccagtt tgaattgttt ggatttactc ttatatattt caagtcagga            ttaaacccctt ttatatattc tcggaacagt gcagggtcga gaaggaaagt gctctggtgc            ctccaatata taggcctggg tttttctgc tgcaacaaa agactcact tcgagccatg            ggaagaggga acctcgaagt caacagaaac aaatcctccc atcatgaaac aaactctgcc            tacatgttat ctccaaagcc acagaagaaa ttgttgacc aggttctgtg cccaaagtcat            tcaaaagaaa gtatggtgag tcccaagatc ttctgtgacc atcaacatg tggtcagagc            agctcgaccc ccatcaaac tcgattgaa ccttactaca gcatctataa cagcagccct            tcccaggagg agagcagccc atgtaactta cagccagtaa actcttttgg atttgccaat            tcatatattg ccatgcatta tcacaccact aatgacttag tgcaggaata tgacagcact            tcagccaagc agattccagt cccctcgtt taaagtcagt gaggtatag gatcttatgt            aaacagtttt tgtttctgat agtaatggac ttattcttaa ctgagatca gtggcggatc            aaaaactaca agattcaact gaaaagttgg cagttatggt tttctttcat ctgatgtgtc            agtatctggt gatttgcttt gtagttgtt gacatcttaa gatttgatgt gaaagtttta            gattttttac cctg         </p>	Homo sapiens
453	133117 G Protein- Coupled Receptor RAIG1	NM_003979	<p>           MNSTGHLQDA PNATSLHVPH SQEGNSTSLQ EGLQDLIHTA TLVCTFLA VIFCLGSYGN P            FIVELSFDFP AFRKERTNFD FMILNLSFCD LFICGVTAAPM FTFVLFSSA SSIPDAFCFT            FHLTSSGFI MSLKTAVIA LHRLMVLGK QPNRTASFCP TVLLTLLWA TSFILATLAT            LKTSKSHLCL PMSLLIAGKG KAILSLLYVD FTFCAVWSV SYIMIAQTLR KNAQVRKCPP            VITVDASRPQ PMGVPVQGG GDPIQCMPA LYRNQYNKL QHVQTRGYK SPNQLVTPAA            SRLQLVSAIN LSTAKDSKAV VTCVIIIVLS LVCCPLPLGIS LVQVVLSSNG SFILYQFELF            GFTLIFKSG LNPFIYSRNS AGLRRKVLWC IQYIGLGFCC CKQKRLRAM GKGNLEVRN            KSSHETNSA YMLSPKPQKK FVDQACGESH SKESMVSPKI SAGHQHCGQS SSTPINTRIE            PYYSIYNSSP SQEESSPCNL QPVNSFGFAN SYIAMHYHTT NDLVQEYDST SAKQIPVPSV            ataacagcat gaagtgcctg ggaactggaag taggcgtgtc ctctccctcg accctcccc A            tcttgtccc tctgtcacc cctcgtcgt tccctccctc cggcgagggc cgcctttata            acaactgctc agagtgcgag ggcgggatat cgtgtccaaag tctccccag cactgaggag            ctgcctgct gccctctgc gcgcggaag cagcaccaaag ttcaaggcca acgcttggc            actagggtcc agaattgcta caacagtccc tgatggttgc cgcaatggcc tgaatccaa            gtactacaga ctttgtgata aggtgaagc ttggggcatc gtctagaaa cgttgggccac            agccggggtt gtgacctcgg tggccttcat gctcacttc ccgactcctg tctgcaaggt            gcaggactcc aacaggcgaa aaatgctgcc tactcagttt ctctctcc tgggtgtgtt            ggcatcttt ggctcacct tcgccttcat catcgagactg gacgggagca caggggccac            acgcttcttc ctctttggga tctcttttc catctgttc tctgcctgc tggctcatgc            tgtcagtcg accaagctcg tccgggggag gaagccctt tccctgttgg tgattctggg            tctggccgtg ggcttcagcc tagtccagga tgttatcgct attgaatata ttgtcctgac            catgaatagg accaagctca atgtcttttc tgagctttcc gctcctcgtc gcaatgaaga            ctttgtctc ctgctcacct acgtcctctt ctgatggcg ctgaccttc tcatgtcctc            cttcaccttc tgtggttctt tcacggggtg gaagagacat gggggccaca tctacctcac         </p>	Homo sapiens

454	133117 G Protein-Coupled Receptor RAIG1	NP_003970.1	gatgctctc tccattgcca tctgggtggc ctggatcacc ctgctcatgc tctctgactt tgaccgcagg tgggatgaca ccatcctcag ctccgcttg gctgccaatg gctgggtgtt cctgttggct tatgttagtc ccgagttttg gctgctcaca aagcaacgaa accccatgga ttatcctgtt gaggatgctt tctgtaaac tcaactcgtg aagaagagct atggtgtgga gaacagagcc tactctcaag aggaatacac tcaaggtttt gaagagacag gggacacgct ctatgcccc tattccacac atttcagct gcagaaccag cctcccaaa aggaattctc catccacagg gccacgctt ggcgagccc ttacaaagac tatgaagtaa agaaagaggg cagctaaact tgcctgaag agtgggacaa atgcagccg gcgcagatc tagcgggagc tcaaaaggat gtggcgaaa tctgagctt tctgacaaa ctgtacaaga cactacggga acagtttgc tccctccag cctcaaccac aattcttcca tgcctgggct gatgtggct agtaagactc cagttcttag agcgctgta gtatttttt tttttgtct catcctttgg atacttctt taagtggag tctcaggcaa ctcaagtta gaccttact cttttgtt gtttttgaa acagatctt gctctgtcac ccaggctga gtgcagtgt gcgatcacag ccagtgac cctcgaccac ctgtgtcaa gcaatcctc catctccat tcccaagt ctggatgac agcggtgag cacagctccc agcctaggc cttaacttg ctgttattt ccatggacta aaggtctggt catctgagct cacgtggct cacacagtc taggggctg ctctctaac tcacagtgg tttgtgagg ctctgtggc cagagcagac ctgcatatc gagcaaaaat agcaaaagc tctctcagc cactggcctg aatctacact ggaagccaa ttgtctggcac cccgctccc caacctct tgcctggga ggagaggta aagatcccc taaattact catctctta tgcctgctc acatgggct cagcagctc cccagcaca attcacaggt caccctctc ttcttgact ttcccaaac ttgctgtcaa ttcagagatc taatctccc ctacgctctg ccaggaattc ttccagacct cactagcaca agcccggtg ctctctgtca ggagaattg tagatcttc tcacttcaa ttccgtggc tgatacttct ctcatctgc acccaacct ctgtaaatag attaccgca ttacggctg catctgtaa gtgggcatg tctcctaag gagagtgt catgtataa taagtattc acctgagtat gcaataaaga tgtgtggcc actcttcat ggtggtggca gcaaaaaaa aaaaaa	Homo sapiens
455	152198 Tachykinin Receptor 2	NM_001057	RRKMLPTQFL FLGLVGLGIFG LTFEFIIGLD GSTGPTREFFL FGILFSICFS CLLAHAVSLT KLVGRGRKPLS LLVILGLAVG FSLVQDVIAI EYIVLTMRNT NVNVFSELSA PRNEDFVLL LTYVLFILMAL TFLMSSFTFC GSFTGWKRHG AHIVLTMLLS IAIWAWITL LMLPDRRW DDTILSSALA ANGWVFLAY VSPEFWLLTK QRNPMDYPVE DAFCKPQLVK KSYGVENRAY SQEITQGF ETDGLYAPY STHFQLQNP PQKEFSIPRA HAWSPYKDY EVKKEG atggggacct gtgacattgt gactgaagcc aatatctcat ctggccctga gacgaacacc acgggcata cagccttctc catgcccagc tggcagctg cactgtggg cactgtggc cctgcccctg tgcgtgtggtg cgtgacgggt aatgccatcg tcatctggat catectggc catcgaggga tgcgcacagt caccaactac ttcatctga atctggcgt gctgacctc tgcatggctg ccttcaatg cgccttcaac ttgtctatg ccagccaca catctgtac ttggccgtg ccttctgcta cttccagaac cttctccca tcacagccat gttgtcagc atctactcca tgaccgcat tgcgtccgac aggtacatgg ccatctcca cccctccag cctcgctt cagctcccag caccagggc gttattgtg gcatctggct ggtggctc gccctggcct cccctcagtg cttctactc accgtacca tggaccagg tgccaccaag	Homo sapiens

Homo  
sapiens

P

456 152198 Tachykinin  
Receptor 2 NP\_001048.1

tgcgtggtgg cctggccgga agacagcggg ggcaagacgc tcctctgtga ccacctcgtg  
 gtgatcgccc tcatctactt cctgcccgtc cgggtgatgt ttgtagccta cagcgtcatt  
 ggccctcagc tctggaggcg cgcagtccc ggacatcagg cgcacgggtgc caacctccgc  
 catctgcagg ccaagaagaa gtttgtgaag accatggtgc tgggtggtgct gacgtttgccc  
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 atgtacaatc ccatcatcta ctgctgtctc aaccacaggt ttgctcttgg gttccggctt  
 gccttcgct gctgcccag ggtcacaccc accaaggaag taaagctcga gctgactccc  
 acgacctccc tctccacgag agtcaacagg tgtcacacta aggagacttt gttcatggct  
 ggggacacag cccctccgga ggctaccagt ggggagggcg ggcgtcccca ggatggatca  
 gggctatggg ttgggtatgg ttgcttgcc cccacacaaa ctcagtgtga aattga  
 HRRMRTVTNY FIVNLALADL CMAAFNAAFN FVYASHNIWY FGRAFICYFQN LEPITAMFVS  
 IYSMTAIAAD RYMAIVHPFQ PRLSAPSTKA VIAGIWLVAL ALASPOCFYS TVTMDQGATK  
 CVVWAPEDSG GKTLILYHLV VIALIYFLPL AMFVAYSVI GLTLWRRVAVP GHQAHGANLR  
 HLQAKKKFKV TMVLVLTFA ICWLPYHLYF ILGSFQEDIY CHKFIQVYL ALFWLAMSST  
 MYNPIIYCCL NHRFRSGFRL AFRCCPWVTP TKEDKLELTP TTSLSTRVNR CHTKETLFMA  
 GDTAPSEATS GEAGRPQDGS GLWFGYGLLA PTKTHVEI

Homo  
sapiens

A

457 152201 Thyrotropin  
Receptor NM\_000369

ccgctcccg gctcctctt ggcctggggg aacccgaggt gcagagctga gaatgaggcg  
 atttcggagg atggagaaat agcccagat cccgtggaaa atgaggcccg cggagtgtgt  
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 gtgtgaagac ataattgggt acaagttcct gagaattgtg gtgtgggttcg ttagtctgtc



458	152201 Thyrotropin Receptor	NP_000360.1	<p> ggctctcctg ggcaatgtct ttgtcctgct tattctctc accagccact acaaaactgaa  cgctccccgc ttctcatgt gcaacctggc ctttgcggat ttctgcattg ggatgtacct  gctcctcatc gcctctgtag acctctacac tcaactctgag tactacaacc atgccatcga  ctggcagaca ggccctgggt gcaaacggc tggttctctc actgtctttg caagcgagtt  atcgggtgat acgctgacgg tcatcaccct gcctcaggca cgcattgtgc atcatggttg ggggctgggt  ggcctggac cggaagatcc tgcctcctt ggtgggaata agtagctatg ccaaagtcag  ttgtgcttc cttctgcgc ccatggaca ccgagacccc tctgtctctg gcataattg ttttgttct  tatctgcctg ccactgacac atagtgcct tgcctatcgt cagctgtgtg catgtgaaga tctacatcac  gagctcaac ccgcagtaac acccagggga caagatacc aaaattgcca agaggatggc  agtccgaat ttaccgact tcatcggact ggcaccaat tcatctatg ctctgtcagc  tgtgtgac ttaccgact tcatcggact ggcaccaat tcatctatg ctctgtcagc  aattctgaac agcctctca tcactgttag caactccaaa atcttgctg tactcttcta  tccactaac tcctgtgcca atccattct ctagctatt ttcaccaagg ccttccagag  ggatgtgtc atcctactca gcaagtttg catctgtaaa cgcaggctc aggcataccg  gggcagagg gtctctccaa agaacagcac tgatattcag gttcaaaaagg ttaccacaga  catgaggcag ggtctccaca acatggaaga tgtctatgaa ctgattgaaa actcccatct  aaccceaaag aagcaaggcc aaatctcaga agagtatatg caaacggttt tgtaagttaa  cactacacta ctcaaatgg taggggaact tacaataaa tagtttcttg aatatgcatt  ccaatcccat </p>	Homo sapiens
459	152245 C-C Chemokine Receptor 2	NM_000648	<p> MRPADLQLV LLLDLPRDLG GMGCSPPCE CHQEDFRVT CKDIQRIPLS PPSTQTLKLI P  ETHLRTIPSH AFSNLPNISR IYVSDIVTLQ QLESHSFYNL SKVTHIEIRN TRNLTYIDPD  ALKELPLKF LGIFETGLKM FPDLTKVYST DIFFILEITD NPYMTSIPVN AFQGLCNETL  TLKLYNNGFT SVQGYAFNGT KLDAVYLNKN KYLTVIDKDA FGGVYSGPSL LDVSQTSVTA  LPSKGLEHLK ELIARNTWTI KKLPLSLSL PLHQEYEENL GDSIVGYKEK SKFQDTHNNA HYYVFFEEQE  CNESMSQSLR QRKSNALNS PLHQEYEENL GDSIVGYKEK SKFQDTHNNA HYYVFFEEQE  DEIIGFGQEL KNPQETLQA FDSHYDYTC GSEDMMVCTP KSDEFNCPED IMGYKFLRIV  VWFVSLALL GNVEVLILL TSHYKLVNPR FLNCNLAFAD FCMGYLLLI ASVDLYTHSE  YYNHAIWQT GPGCNTAGFF TVFASELSVY TLTVTIERW YAITFAMRLD RKIRLRHACA  IMVGGWVCCF LLALLPLVGI SSYAKVSICL PMDTETPLAL AYIVFVLTLN IVAFVIVCCC  HVKIYITVRN PQYNPGDKDT KIAKRMVLI FTDFICMAPI SFYALSAILN KPLITVSNK  ILLVLFYPLN SCANPFLYAI FTKAFQRDVF LIENSHLTPK KQQISEEYM QTVL  VQKVTHDMRQ GLHNMEDVYE LIENSHLTPK KQQISEEYM QTVL  caggactgcc tgagacaagc cacaagctga acagagaaa tggtatgaac aaggacgcac A  ttccccagta catccacaac atgctgtcca catctgttc tcggtttatc agaaaatacca  acgagagcgt tgaagaagct accaccttt ttgattatga ttacgggtgct cctgtcata  aatttgacgt gaagcaaat ggggcccac tcctgcctcc gctctactcg ctggtgttca  tctttggttt tggggcaac atgctggctg tcctcatctt aataaactgc aaaaagctga  agtgcctgac tgacatttac ctgctcaacc tggccatctc tgatctgctt tttcttatta  ctctcccat gtgggctcac tctgctgcaa atgagtggtt ctttgggaat gcaatgtgca  aattattcac aggcctgtat cacatcggtt attttggcg aatcttctc atcatcctcc  tgacaatcga tagatacctg gctattgtcc atgctgtgtt tgcttataa gccaggacgg </p>	Homo sapiens

Homo  
sapiens

Homo  
sapiens

460 152245 C-C NP\_000639.1  
 Chemokine  
 Receptor 2  
 tcaaccttgg ggtggtgaca agtgtgatca cctggttggg ggtgtgtgtt gcttctgtcc  
 caggaatcat ctttactaaa tgcagaaaag aagattctgt ttatgtctgt ggccttatt  
 ttccacgagg atggaataat ttccacacaa taatgaggaa catttgggg ctggtcctgc  
 cgctgtcat catgtctatc tgctactcgg gaatcctgaa aacctgctt cgggtgtcgaa  
 acgagaagaa gaggcatagg gcagtgagag tcatcttcac catcatgatt gtttactttc  
 tcttctggac tccctataac attgtcattc tcctgaacac ctccaggaa ttcttcggcc  
 tgagtaactg tgaagcacc agtcaactgg accaagccac gcagtgaca gagactcttg  
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 ttttctacag ggagacagtg gatggagtga cttcaacaaa cagccttc actggggagc  
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 taacaatctg tatataacaa caaactcaa ggtttgttg aacaatagaa acctgtaaag  
 caggtgcccc ggaacctcag gctgtgtgt actaatagc actatgtcac ccaatgcata  
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 gtgtatttaa ccttgaaggg ttcaccaggt cagggagagt ttgggaactg caataacctg  
 ggagttttgg tggagtccga tgattctctt ttgcataagt gcatgacata tttttgctt  
 attcacagtt atctatggca cccatgcacc ttacatttga aatctatgaa atatcatgct  
 ccattgttca gatgcttctt aggccacatc cccctgtcta aaaattcaga aaattttgt  
 ttataaaaga tgcattatct atgatatgct aatatatga tatgcaatat aaaatttag  
 461 152299 Interleukin- 1G5459  
 8 Receptor A  
 MLVVLILNC KKLKCLTDIY LLNLAISDLL FLITLPLWAH SAANEWVFGN AMCKLFTGLY  
 HIGYFGGIF ILLTIDRYL AIVHAVFALK ARTVTFGVVT SVITWLVAVF ASVPGIIFTK  
 CQKEDSVYVC GPYFPRGWN FHTIMRNILG LVPLLLIMVI CYSGILKILL RCRNEKKRHR  
 AVRVIPTIMI VYFLFWTPYN IVILLNTFQE FFGLSNCEST SQLDQATQVT ETLGMTHCCI  
 NP1IYAFVGE KFRRLSVFF RKHITKRFCK QCPVYRETV DGVSTNTPS TGEQVVSAGL  
 CAGAAATCCT CAGGTCCCAC AGAAATGAAC ACGTTTCTA AAATAAAGTC AAGCCAAAGCT A  
 GTCCTACCC AAAGAAATC CTAGCAAGCA AAGTGGCTT CCTTCTGAG GCCCCAGCCA  
 GGTGTGTCCA ACCGTAGGAG CCACAGCTCA GAGTGGCTT TGACTTAACA GTTAGAGGGC  
 ACTTGATGAG TAAGGTGAAA TAGGGAACC AAGTCAGACG ACACCTCCCT TCTGAGTCCC  
 AACCATGTCT ACATCTGGAG AAGAACAGTT AAGTCAAGGG ATCACAGACT TGTGATTAGA  
 GACTGCCAGG GTCATATGA CCAAGCGGGG GTCCAGGTG TGAAGCTGGG GTTAGGATC  
 CATTATCTGA ATTTCCACT CTATGGATGA TCACTTTAT TCTTTTCTT TTCTTGAATT  
 TATTTCCATT TGTTTATTC TAAATTCCTT GGTAGATCAC CTGTGAAAGC TTGCAACTGT  
 CTGATAAGAA TAAAGGGGA AGGATTGAC TTTACAGCAG AGACTTCAGA AGGAGTCTC  
 TCTAGGAGCA AATTGGGGC AATCCAGTGG GAAGGAGGTG GAAGACTGCA CTTGAGCTGC  
 GTTTGGACAA CAGGCACACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT

Homo  
sapiens

A

152299 Interleukin-8 Receptor A  
NM\_000634

462

agctgttaag tcactctgat ctctgactgc agtctctact gttggacaca cctggccggt  
 gcttcagtta gatcaaacca ttgtgaaac tgaagaggac atgtcaata ttacagatcc  
 acagatgtgg gattttgatg atctaaattt cactggcatg ccactgacg atgaagatta  
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 ctttgccctg acctgccc tctggcccgc ctccaagggt aatggctgga tttttggcac  
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 gttggcctgc atcagtgtgg accgttacct ggcattgtgc catgccacac gcacactgac  
 ccagaagcgt cacttggtca agttgttttg tcttggtgc tgggactgt ctatgaatct  
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 ggatgccact gagattctgg gatttctcca tagctgctc aacctcatca tctacgcctt  
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 aatcctctc caggaggtct cagcttcacc ctgaggtgag catcatcttc tgggttaggc  
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463	152299 Interleukin-8 Receptor A	NP_000625.1	acaggaatga atgcatgctg aaaagaccac tctttt	VFIIAYALVF LLSLLGNSLV P	Homo sapiens
			DFDDLNFQMW MSNITDPQMW DFDDLNFQMW MLEETLNKY VFIAYALVF LLSLLGNSLV P		
			MLVILYSRVG RSVTDVYLN LALADLLFAL TLPWAASKV NGWIFGTFLC KVVSLLEKVN		
			FYSGILLAC ISVDYLAIV HATRTLTQKR HLKFEVCLGC WGLSMNLSLP FFLFRQAYHP		
			NNSSPVCYEV LGNDTAKWRM VLRILPHTFG FIVPLFVMLF CYGFTLRLTF KAHMGQKHRA		
			MRVIFAVVLI FLLCWLPLYNL VLLADTLMT QVIQESCERR NNIGRALDAD EILGFLHSL		
			NPIIYAFIGQ NFRHGLKIL AMHGLVSKF LARHRTSYT SSSNVVSSNL		
464	158822 Mas Proto-Oncogene	NM_002377	cctcaggcct cctcatggat gggtaaaacg tgacatcatt tgtgttgag gaacccacga A		Homo sapiens
			acatctcaac tggcaggaaac gectcagtcg ggaatgcaca tcggcaaat cccatcgtgc		
			actgggtcat tatgagcatc tcccagtggt ggttgggtga gaatgggatt cctctctggt		
			tcctgtgctt ccggatgaga agaaatccct tcactgtcta catcaccac ctgtctatcg		
			cagacatctc actgctcttc tgtattttca tctgtctat cgactatgct ttagattatg		
			agctttcttc tggccattac tacacaattg tcacattatc agtgactttt ctgtttggct		
			acaaacaggg cctctatctg ctgacggcca ttagtgtgga gagtgccctg tcagtccttt		
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			tattctcat cttcgtatg cccatgagac tctttacct gctgactat gattatggt		
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			aagtgttctt gaccagggtt ttcaaatgag aatgcaacc tcggcgccag aaagacaatt		
			gtaatacgtt cacagttgag actgtcgtc aagaactgt aggaaagtg tggataaaaa		
			tgggtggaaca caggtcattt ttagtttgt cttggaatat gacttaagta tctcctaaat		
			gtgatacaga agaactatc atcccatatg catgagatac taattaatga tga		
			MDGSNVTSEV VEEPTNISTG RNASVGNHR QIPVHWVIM SISPVGFVEN GILLWFLCFR P		Homo sapiens
465	158822 Mas Proto-Oncogene	NP_002368.1	MRNPFTVYI THLSIADISL LFCIFILSID YALDYELSSG HYYTIVTISV TFLFGYNTGL		
			YLLTAISVER CLSVLYPIWY RCHRPKYQSA LVCALLWALS CLVTTMEYVM CIDREEESH		
			RNDCRAVIF IAILSLVFT PLMLVSSTIL VKIRKNTWA SHSKLYIVI MVTIIFLIF		
			AMPMLLYLL YVEYWSTFGN LHHISLLFST INSSANPFIY FVGSKKKR FKESLKVLT		
			RAFKDEMQR RQKDCNTVT VETV		
466	159152 G Protein-Coupled Receptor GPR43	NM_005306	atgctgcggg actggaagag ctccttgatc ctcctggctt acatcatcat cttctcat A		Homo sapiens
			ggcctccctt ccaactctt ggccttgagg gctttgtgg ggcggatccg ccagccccag		
			cctgcacctg tgcatatctt cctgctgagc ctgacgtgg ccgacctct cctgctgctg		
			ctgctgccct tcaagatcat cgaggctgcg tcgaactcc gctggtacct gcccaaggct		
			gtctgcgcc tcacgagttt tggcttctac agcagatct actgcagcac gtggctctg		
			gcgggcatca gcatcgagcg ctacctggga gtggcttcc ccgtgcagta caagctctc		
			cgccggctc tgtatggagt gattgagct ctggtggcct gggttatgtc ctttggctac		
			tgcaccatcg tgatcatcgt tcaatacttg aacacgactg agcaggtcag aagtggcaat		

467	159152 G Protein- Coupled Receptor GPR43	NP_005297.1	gaaattacct gctacagagaa cttaccgat aaccagttgg acgtgtgtgt gcccgtgcgg ctggagctgt gctgtgtgt cttcttcac cccatggcag tcaccatctt ctgtactgtg cgttttgtgt ggatcatgt ctcacagccc cttgtggggg cccagagcgg gcgccagacc gtggggctgg ctgtgtgtgac gctgtcaat ttcctgtgtg gcttcggacc ttacaacgtg tccacactgg tggggtatca ccagagaaaa agccctgtgt ggcggtcaat agccgtggtg ttcagttcac tcaacgccag tctggacccc ctgctcttct attctcttc ttcagtggtg cgcaaggcat ttgggagagg gctgcaggtg ctgcggaatc agggctcttc cctgttggga cgcaaggaca aagacacagc agagggaca aatgaggaca ggggtgtggg tcaaggagaa gggatgccaa gttcggactt cactacagag tag MLPDKSSLI IMAYIIIFLT GLPANLLAIR AFVGRIRQPQ PAPVHILLS ITLADLLLL P LLPFKIEAA SNFRWYLPKV VCALTSEGFY SSIYCWSTWLL AGISIERYLQ VAFPVQYKLS RRPLYGVIAA LVAWVMSFGH CTIVIIQVYL NTTEQVRSGN EITCYENFTD NQLDWLFPVR LELCIVLFFI PMAVTIFCYW RFVWIMLSQP LVGAQRARRA VGLAVVTLN FLVCFGPYNV SHLVGYHQRK SPWRSIAV FSSLNASLDP LLFYFSSSVV RRAFGRGLQV LRNQSSLLG RRGKDTAEGT NEDRGVQGE GMPSSDFTTE	Homo sapiens
468	159973 Vasoactive Intestinal Polypeptide Receptor 1	NM_004624	ggccacaggc cagcgccact ctgccaggct cccggccatc gccgcctgg tgcgcccggc A gccagctctt tgcccgcggc gggccgcccgc ccgcgggctc agggcagacc atgcgcccgc caagtcgctt gcccgcggc tggtctatgc tgctggcagg cgccctcgcc tgggccttg ggccggcggg cgccaggcg gccaggctgc aggagagatg tgactatgt cagatgatcg aggtgcagca caagcagtc ctggaggagg cccagctgga gaatgagaca ataggtgca gcaagatgtg ggaacaacct acctcttctt cagccacccc tcggggccag tagttgtct tggcctgtcc cctcatcttc aagctcttct cctccactca agccgccaat gtaagccgca gctgcacga cgaaggctgg acgcacctgg agcctggccc gtaccccat gccctgtggt tggatgacaa ggacgcagt ttggtatgag agcagacctt gtctacggt tctgtgaaga ccggctacac cattggctac ggcctgtccc tcgccacctt tctggtcgcc acagctatcc tgagcctgtt caggaagctc cactgcacgc ggaactacat ccacatgcac ctcttcata ccttcacctt gagggtgtcc gctgtcttca tcaagacctt ggccctcttc gacagcgggg agtcggacca gtgtcccgag ggctcggtgg gctgtaaggc agccatggtc tttttccaat attgtgtcat ggctaaactc ttctggctgc tgggtgaggc cctctacctg tacacctgc ttgccgtctc cttcttctct gagcggaagt acttctgggg gtacatactc atcggtggg gggtacccag cacattcacc atggtgtgga ccatgcccag gatccatttt gaggattatg ggtgctggga caccatcaac tcctcactgt ggtggtatcat aaaggggccc atctcactt ccatcttggg aaacttcac cttgttattt gcatcatccg aatcctgctt cagaaactgc ggccccaga tatcaggaa agtgacagca gtccatactc aaggtagcc aggtccacac tcctgctgat cccctgtttt ggagtacact acatcatgtt cgccttcttt cggacaatt ttaagcctga agtgaagatg gtctttgagc tcgtgtgtgg gtctttccag ggtttgtgg tggctatcct ctactgcttc ctcaatggtg aggtgcaggc ggagctgagg cggaagtggc ggcgtggca cctgcagggc gtctggggt ggaacccaa ataccggcac ccgtcgggg gcagcaacgg cgccagctgc agcacgcagg ttctcatgct gaccgcgtc agccaggtg ccgcgcgtc ctccagcttc caagccgaag tctcctgtgt ctgaccacca ggatccccg ggcccaaggc ggcctctccc gcccttccc actcaccocg cgagacgcgg gggacagagg	Homo sapiens

469	159973	Vasoactive Intestinal Polypeptide Receptor 1	NP_004615.2	<p>cctgccccgg cgcgccagc ccggccctg ggctcgagg ctgcccccg cccccgtgc</p> <p>tctgtccgg aactcctag agaagcagc cctagagcct gctgagcgt tttctagcaa</p> <p>gtgagagaga tgggagctcc tctctggag gattgcaggt ggaactcagt cattaagactc</p> <p>ctctccaaa ggccccctac gccaatcaag ggcaaaaagt ctacatactt tcatectgac</p> <p>tctgccccct gctggctctt ctgccaatt ctgagaaagc aaccggtgga tctcacaaca</p> <p>acactggtgt gacctgagg cagaaaggtt ctgccccggg aaggtcacca gcaccaacac</p> <p>cacggtagtg cctgaaattt caccattgct gtaagttcc ttggggttaa gcattaccac</p> <p>tcaggcattt gactgaagat gcagtcact accctattct ctcttaagc ttagttatca</p> <p>gctttttaa gtgggttatt ctggagttt tgtttggaga gcacacctat cttagtgggt</p> <p>ccccaccgaa gtggactggt cctgggtgta gctgggtggc aggaaggtgc aacccaagga</p> <p>ctgagggact ctgaagcctc tgggaaatga gaaggcagcc accagcgaat gctaggtctc</p> <p>ggactaagcc tacctgctct ccaagtctca gtggcttcat ctgtcaagtg ggaatctgtca</p> <p>caccagccat acttatctct ctgtgctgtg gaagcaacag gaatcaagag ctgccctcct</p> <p>tgccaccca cctatgtgcc aactgttgta actaggtcga gagatgtgca cccatgggct</p> <p>ctgacagaaa gcagatacct caccctgcta cacatacagg attgaaactc agatctgtct</p> <p>gataggaatg tgaagcacg gactcttact gctaaactttt gtgtatcgta accagccaga</p> <p>tctcttgtt tatttgttta ccacttgat tattaatgcc attatcctga attccccctg</p> <p>ccacccacc ctccctggcg tgtggctgag gaggcctcca tctcatgtat catctggata</p> <p>ggagcctgct ggtcacagcc tctctgtct gcccctcacc ccagtggcca ctacagctcc</p> <p>taccacacac tctgccagaa gatccccctca ggaactgcaac aggttgtgtc aacaataaat</p> <p>gttgcttgg a</p>	Homo sapiens
470	160040	Vasoactive Intestinal Polypeptide Receptor 2	NM_003382	<p>IGCSKWDNL TCWPATPRGQ VVVLACPLIF KLFSSIQGRN VSRCTDEGW THLEPGPYPI</p> <p>ACGLDDKAAS LDEQTMFYG SVKTGYTIGY GLSLATLLVA TAILSLFRKL HCTRNYIHMH</p> <p>LFISFILRAA AVFIKDLALF DSGESDQCSE GSVGCKAAMV FFQYCVMANF FWLLVEGLYL</p> <p>YTLAVSFFS ERKYFWGYIL IGWVPSTFT MWTIARIHF EDYGCWDTIN SSLWIIKGP</p> <p>ILTSILVNF IFCILIRILL QKLRPPDIRK SDSSPYSLA RSTLLILPLF GVHYIMEAFF</p> <p>PDNEKPEVKM VFELVGSFQ GFVAILYCF LNGEVQAE LR RKWRRWHLQG VLGWNPKYRH</p> <p>PSGGSNGATC STQVSMLTRV SPGARRSSSF QAEVSLV</p> <p>cgggacgagg gggcgcccc cgcgctcggg cgcctcggct acagctgcgg ggcccagggt A</p> <p>ctccgcgcac tcgctccccg cccatgctgg agcgcgcgga acccggggga cctaggacgg</p> <p>aggcgggcg cgtgggccc ccccgccac cctgagctcg gtagcgagc gctgctgct</p> <p>cccgctgctg tgactctgtg gtagctgccc ccgctgaaca gattcaccc agaagcgga</p> <p>tttcatcttg aatacagga ggaagaaaca aaatgtacag agcttctgag gtctcaaca</p> <p>gaaaaacaca agcctgcag tggcgtctgg gacaacatca cgtgctggcg gcctgccaat</p> <p>gtggagaga ccgtcacgt gccctgccc aaagtcttca gcaattttta cagcaaaagca</p> <p>gaaacataa gcaaaactg tacgagtac gtaggttcag agacgttccc agattcgtc</p> <p>gatgcctgtg gctacagcga cccggaggat gagagcaaga tcacgtttta tattctggtg</p> <p>aaggccattt ataccctggg ctacagtgtc tctctgatgt ctcttgcaac aggaagcata</p> <p>attctgtgct tcttcaggaa gctgcactgc accaggaatt acatccacct gaacctgttc</p> <p>ctgtccttca tctgagagc catctcagtg ctggtcaagg acgacgttct ctactccagc</p>	Homo sapiens

471	160040 Vasoactive Intestinal Polypeptide Receptor 2	NP_003373.1	tctggcacgt tgcactgcc tgaccagcca tctctctggg tgggctgcaa gctgagcctg gtcttctctgc agtactgcat catggccaac ttcttctggc tgcctgtgga ggggctctac ctccacaccc tctgtgtggc catgctccc cctagaaggt gcttctctggc ctactctctg atcggatggg gctctccccc cgtctgcac ggtgcattgga cctgggccc gctctactta gaagacaccc gttgctggga taaaaagac cacagtgctgc cctgtgggt cacaagaata ccgattttta ttccatcat cgtcaatttt gtctttttc ttagtattat acgaattttg ctgcagaagt taacatcccc agatgtggc ggaacgacc agtctcagta caagaggctg gccaagtcca cgctctctgt tatcccgctg ttccggcgtcc actacatggt gtttgcctg tttcccatca gcatctctc caaataccag atactgttg agctgtgct cgggtcgttc cagggcctgg tgggtggcct cctctactgt ttctgaaca gtgagtgca gtgcagctg aagcgaatat ggcaagccg gtgcccacc ccgtccgca gccggatta cagggtctgc ggttctctct tctccacaa cggctcggag ggcgccctgc agttccacc cgcgtcccga gcccagtcct tctgcaaac ggagacctg gtcattctag cccacccctg cctgtcggac gcggcgggag gccacgggt cgggcttct gcgggctga gacgcgggt tctctcttcc agatgccga gcaccgtgc ggccaggtca gcgggtct gactccgtca agctggtgtg ccactaaacc ccatacctg CWRPANVGET VTVPCKVFS TFYILVKAIV TLGYSVSLMS DVLYSSSGTL HCPDQPSWV FLAYLLIGWG LPTVCIGAWT SIIRILLQKL TSPDVGGNDQ ICLGSFQGLV VAVLYCFLNS FHRASRAQSF LQETSVI	LLRSQTEKHK ACSGVWDNIT P KNCTSDGWE TFPDFVDACG YSDPEDESKI IHLNLFSLFI LRAISVLVKD LVEGLYLHTL LVAMLPARRC CWDNDHSVP WWVIRIPILI SIIVNFVLEI YMLPFGVH YMVFAVFPIS ISSKYQILFE RSCRTPSPAS RDYRVCSSSF SHNGSEGLQ	Homo sapiens
472	160055 Motilin Receptor (GPR38)	NM_001507	atgggagcc cctggaacgg cagcgacgg cccgaggggg cgcgggagcc gccgtggccc A gcgctgcgc cttgcgacga gcgcgcctgc tcgcccttcc ccctgggggc gctggtgcg gtgaccgctg tctgctgtg cctgttctgc gtcgggggtga gcggcaacgt ggtgaccgtg atgctgatcg ggcgctaccg ggacatgcg accaccacca acttgtacct gggcagcatg gccgtgtccg acctactcat cctgtcggg ctgcccctgc accgtatccg cctctggcgc tcggggccct ggtgttctcg gccgtgctc tgccgctgt cctctacgt gggcaggggc tgcaacctag ccacgctgt gcacatgacc gcgctcagcg tcgagcgcta cctggccatc tgccgcccgc tcgcgcccgc cgtcttggtc accggcgcc gcgtccgcgc gctcctcgt gtgctctggg ccgtggcgt gctctctgc ggtccccttct tgttctctgt gggcgtcgtg caggacccc gcatctcct agtcccgggc ctcaatggca ccgcgcggat cgcctctctg cctctgcct cgtgcgcgc tctctggctc tgccggggcg caccgcctc cccgcctctg gggcccaga ccgaggagcc cgcggcgctg ttccagcccg aatgccggc gagccccgcg cagctggcg cgtgcgtgt catgctgtg gtaaccacc cctacttct cctgccctt ctgtgcctca gcatcctcta cgggctcatc gggcggggagc tgtggagcag ccggcgccg ctgcgaggg ccggccgctc gggcggggag agaggccacc ggcagacctg ccgcgtctg ctgggtgtgg ttctggcatt tataatttgc tgggtgcct tccacgttgg cagaatcatt tacataaaca cggaagattc gcgagatgat tacttctctc agtactttta catcgtcgtc		Homo sapiens

473	160055 Motilin Receptor (GPR38)	NP_001498.1	ctgcaacttt tctatctgag cgcattatc aaccaatcc tctacaact catttcaaag aagtacagag cggcgccctt taaactgctg ctgcgaagga agtccaggcc gagaggcttc cacagaagca gggacactgc ggggaagtt gcaggggaca ctggaggaga cacggtgggc tacaccgaga caagcgctaa cgtgaagacg atgggataa MLIGRYRDMR TTTNLYLGS AVSDLLILG LPFDLYLWR SRPWVFGPLL CRSLYVGE CTYATLLHMT ALSVERYLAI CRPLRARVLV TRRRVRALIA VLWAVALLSA GPFLFLVGE QDPGISVVPQ INGTARIASS PLASSPPLWL SRAPPPSPS GPETAEEAAL FSRECRPSA QLGALRVMLW VTTAYFFLPF LCLSLYGLI GRELWSSRRP LRGPAAASGRE RGRQTVRVL LVVLAFLIC WLPFHVGRII YINTEDSRMM YFSQYFNIVA LQLFYLASI NPILYNLISK KYRAAFAFKLL LARKSRPRGF HRSRDTAGEV AGDTGGDTVG YTETSANVKT MG atggacctgc ccccgagct ctccttcggc ctctatgtgg ccgcctttgc gctgggcttc A ccgctcaacg tccctgacct cggagcgcg acggccacg ccggctccg tctacacct agcctggtct acgacctga cctgggctgc tccgacctgc tgcagacgt ctctctgccc ctgaaggcgg tggagcgct agcctcggg gctggcctc tgcggcctc gctgtgcccc gtcttcggg tggccactt cttccacct tatgcccgg ggggcttctt ggcgccccg agtgcaggcc gctacctgg agcagcctc ccttgggctt accaagcctt ccggaggccg tgctattctt ggggggtgtg cggggccatc tggggcctcg tccctgtgta cctgggtctg gtctttgggt tggaggtcc aggaggtcg tggaccaca gcaacacctt cctgggcatc aacacacggg tcaacggctc tccggtctgc ctggagcctt gggaccggc ctctgcccg cgggccgt tcaacctct tctcctgctt tttttctgc ccttgccat cacagcctt tgctacgtg gctgctcgc ggcactggc cgtccggcc tgcgcacag cgggaagtg cgggcgcct ggtggcggg cggggccct ctaacgtgc tgcctgctg aggacctac aacgctcca acgtggccag cttcctgtac ccaatctag gaggctctg cgggaagtg gggtcatca cgggtgcctg gagtgtgtg cttaatccg tggtagccg ttaactggga agggtcctg gcctgaagac agtgtgtgc gcaagaacg agggggcaa gtccccagaag taa	Homo sapiens
474	160059 G Protein- coupled Receptor GPR40	NM_005303	atggacctgc ccccgagct ctccttcggc ctctatgtgg ccgcctttgc gctgggcttc A ccgctcaacg tccctgacct cggagcgcg acggccacg ccggctccg tctacacct agcctggtct acgacctga cctgggctgc tccgacctgc tgcagacgt ctctctgccc ctgaaggcgg tggagcgct agcctcggg gctggcctc tgcggcctc gctgtgcccc gtcttcggg tggccactt cttccacct tatgcccgg ggggcttctt ggcgccccg agtgcaggcc gctacctgg agcagcctc ccttgggctt accaagcctt ccggaggccg tgctattctt ggggggtgtg cggggccatc tggggcctcg tccctgtgta cctgggtctg gtctttgggt tggaggtcc aggaggtcg tggaccaca gcaacacctt cctgggcatc aacacacggg tcaacggctc tccggtctgc ctggagcctt gggaccggc ctctgcccg cgggccgt tcaacctct tctcctgctt tttttctgc ccttgccat cacagcctt tgctacgtg gctgctcgc ggcactggc cgtccggcc tgcgcacag cgggaagtg cgggcgcct ggtggcggg cggggccct ctaacgtgc tgcctgctg aggacctac aacgctcca acgtggccag cttcctgtac ccaatctag gaggctctg cgggaagtg gggtcatca cgggtgcctg gagtgtgtg cttaatccg tggtagccg ttaactggga agggtcctg gcctgaagac agtgtgtgc gcaagaacg agggggcaa gtccccagaag taa	Homo sapiens
475	160059 G Protein- coupled Receptor GPR40	NP_005294.1	MDLPPQLSFG LYVAAFALGF PLNVLAIRGA TAHARLRITP SLVYALNLGC SDLLTVSLP P LKAVEALASG AWPLPASLCP VFAVAHFFPL YAGGFLAAL SAGRVLGAAF PLGYQAFRRP CYSWGVCAAI WALVLCILGL VEGLEAPGGW LDHSNTSLGI NTPVNGSPVC LEAWDPASAG PARFSLSLLL FFLPLAITAF CYVGCILRALA RSLTHRRKL RAAWVAGGAL LTLLLCVGPY NASNVASFLY PNLGGSWRKL GLITAWSV LNPLVTGYLG RGPGLKTCA ARTQGGKSQK atgcacacgg tggctacgtc cggaccccaac gcgtcctggg gggcaccggc caacgcctcc A ggctgccccg gctgtggcg caacgcctcg gacggccag tccctcgcc cggggccgtg gacgctggc tctgtccgt cttcttcgg gctgtatgc tgcgtggcct ggtggggaac tcgctggta tctacgtcat ctgcccacc acgcgatgc gacgctgac caacttctac atcgccaaac tggcgccac gacgtgacc tctcctgt gctgcgtccc cttcacggcc ctgctgtacc cgtgccccg ctgggtgctg ggcacttca tgtgcaagt cgtcaactac atccagcagg tctcgtgtga gccacgtgt gccacttga ccgccatgag tgtggaccgc tggtagctga cgtgttccc gttgcgcgc ctgcacgcc gcacgcccc cctggcgctg gctgcagcc ttagcatctg gtaggctct cggcggtgt ctcgccccg	Homo sapiens
476	160189 G Protein- Coupled Receptor GPR54	NM_032551	atgcacacgg tggctacgtc cggaccccaac gcgtcctggg gggcaccggc caacgcctcc A ggctgccccg gctgtggcg caacgcctcg gacggccag tccctcgcc cggggccgtg gacgctggc tctgtccgt cttcttcgg gctgtatgc tgcgtggcct ggtggggaac tcgctggta tctacgtcat ctgcccacc acgcgatgc gacgctgac caacttctac atcgccaaac tggcgccac gacgtgacc tctcctgt gctgcgtccc cttcacggcc ctgctgtacc cgtgccccg ctgggtgctg ggcacttca tgtgcaagt cgtcaactac atccagcagg tctcgtgtga gccacgtgt gccacttga ccgccatgag tgtggaccgc tggtagctga cgtgttccc gttgcgcgc ctgcacgcc gcacgcccc cctggcgctg gctgcagcc ttagcatctg gtaggctct cggcggtgt ctcgccccg	Homo sapiens



Accession	Gene	Protein	NP	Species	Sequence
477	160189	G Protein-Coupled Receptor GPR54	NP_115940.1	Homo sapiens	<p>caccgcctgt caccgggccc gcgcgcctac tgcagtgagg ccttccccag ccgcgcctgt</p> <p>gagcgcctc tgcactgta caactgctg gcgtgtacc tgcgtccgct gctgcgcc</p> <p>tgcgcctgt atgcggccat gctgcgccac ctggccggg ctgcgcctgt cccgcgcgcc</p> <p>gccgatagc cctgcaggg gcagtgctg gcagagcgc caggcgcctg gcgggccaa</p> <p>gtctgcggc tgggggggc cgtgtgctg ctctgcgcg cctgtgggg cccatccag</p> <p>ctgttctgg tgcgcaggc gctgggccc gcggctctt ggcacccac cagctacgcc</p> <p>gcctacgcg ttaagacctg ggtcactgc atgtctaca gcaactccg cgtgaacccg</p> <p>ctgtctacg ccttctctgg ctgcacttc cgacaggct tccgcgcgt ctgccccgc</p> <p>gcgcgcgcc gccccggcg cccccggcg cccggacct cggaccccg agccccacac</p> <p>gcggagctg accgcctgg gtcccaccc gcccccgcca gggcgagaa gccagggagc</p> <p>agtgggctg ccgcgcgcg gctgtgcgc ctgggggag acaacgccc tctctga</p> <p>SLVIYICRH KPMRTVTNFI IANLAATDVT FLCCVPFTA LLYPLPGWVL GDFMCKFVNY</p> <p>IQQVSQATC ATLAMSVDLR WYTVFPLRA LHRRTPLRAL AVSLSIWVGS AAVSAPVLAL</p> <p>HLSPGPFRAY CSEAFPSRAL ERAFALYNLL ALYLLPLLAT CACYAAMLRH LGRVAVRPAP</p> <p>ADSAIQGVQL AERAGAVRAK VSRLVAAVVL LFAACWGPIQ LFLVLQALGP AGSWHPRSVA</p> <p>AYALKTWAHC MSYSNSALNP LLYAFLGSHF RQAFRRVPCP APRRRPRRR PGPSDPAAPH</p> <p>AELHRLGSHP APARAOKPGS SGLAARGLCV LGEDNAPL</p>
478	160202	Adrenomedullin Receptor (ADMR)	LG6564	Homo sapiens	<p>CCGGCGCCAC GTGCTGTGCTG CTGCGGCCTT CAGTGACGG GCATTGTCTAT GCACCTGGCTG A</p> <p>ACCTATCATG AGACCTGTCT GCTGCTCACA CTGTATGGAA CCCACATCTG CCTACACTGC</p> <p>CACCTGGTAC CAACCTGCTT ACTTCTTCTA TGATGTCTAT TGACTGTCTG TACATGCTAG</p> <p>ACTGCGCTAT TCACCGGATC CTTGACAACT TTATCAGCCA GACTGCGGG GCGGGCTGCG</p> <p>ATGCTGTGGT CCATTACTTG CTAAGGACCA GACCGCGGG GCACATGCGC CTCTCTTCTC</p> <p>TTCTGTGACA CCAGCGGTTA CATAATCATT ACCACGGGTG ATAGCCAGAC TGCTGCGAGC</p> <p>AACCCGCCAC CTGAGGCA AGCCTGAGCT TTCAGGACCA CCATTGCTC GCAAAGACTT</p> <p>GCGCCATGTG TCCCACTCAG TGTCTTACAC CCAGCTGAGG T</p>
479	160202	Adrenomedullin Receptor (ADMR)	NM_007264	Homo sapiens	<p>cagcctctc acagctccc atagcctgga cctgcggcc ctccctccag gaccgagggg A</p> <p>ctcccaagg aaactcagg gtgtgctggt cccaatgtca gtgaaccca gctggggggc</p> <p>tggccctcg gagggggtca ccgcagtgc taccagtgc cttggagaga tccacaactg</p> <p>gaccgagctg cttgacctc tcaaccacac ttgtctgag tgcacgtgg agctcagcca</p> <p>gagcaccag cgcgtggtc tctttgccc ctacctggc atgttgtgg ttgggtggt</p> <p>ggagaacctc ctggtgatc ggtcgaactg cctgggcca ggcggggcag ggtgatgaa</p> <p>cctctacatc ctcaacatgg ccatcgcgga cctgggcatt gtctgtctc tgcccggtg</p> <p>gatgtggag gtcacgctg actacacctg gctctggggc agcttctct cgcgttcac</p> <p>tcactactc tactttgtca acatgtatag cagcatctc tctctggtg gcctcagtgt</p> <p>cgaccgctat gtcacctca ccagcctc cccctctgg cagcgtacc agcaccaggt</p> <p>gcggcgggcc atgtgtgag gcatctgggt cctctcgcc atcatccgc tgcctgaggt</p> <p>ggtccacatc cagctggtg agggccctga gccatgtgc ctcttcattg cacttttga</p> <p>aacgtacagc acctgggccc tggcggtggc cctgtccac accatctgg gcttctgtc</p> <p>gccttccct ctcatcacag tcttcaatgt gctgacagc tgcgggctgc ggcagccagg</p> <p>acaacccaag agccggcgcc actgctgtc tgcgtggcc tactgtgcat tctttgtcat</p>

480	160202 Adrenomedullin NP_009195.1 in Receptor (ADMR)	gtgctggctg ccctatcatg tgacctgctg gctgctcaca ctgcatggga cccacatctc cctccactgc cactggctcc acctgtctta cttcttctat gatgtcattg actgcttctc catgtgcac tgtgtcatca accccatcct tccattacct tccataaggac cagaccaagg cgggcacatg cgggtcctct aatgctgtag caccacagca ttccatcatc atcaccagg gtgatagcca cgctcctct gcagcccccc acctgagcc gcctcttaca cccagctgag gta tccaaatact tcccccatc cctccactca acctcttaca cccagctgag gta MSVKPSWPGP PSEGVAVPT SDLGEIHNWT ELIDLFNHTL SECHVELSQS TKRVVLFALY P LAMFVVGLVE NLLVICVNR GSGRAGLMNL YILNMAIADL GIVLSLPVMM LEVTLDTWL Homo WGSFSCRPTH YFYFNMYS IFFLVCLSDV RYVTLTSASP SWQRYQHRVR RAMCAGIWL sapiens SAIIPLEWV HIQLVEGPEP MCLFMAPFET YSTWALAVALL STTILGFLP FPLITVFNVL TACRLRQPGQ PKSRRHCLLL CAYVAVFVVC WLPYHVHTLL LTLHGTHISL HCHLVHLLYF FYDVIDCFSM LHCVINPILY NFSLPHERGR LNAVVHYLP KDQTKAGTCA SSSSCSTQHS IIITKGSQP AAAAPHPEPS LSFQAHLLP NTSPISTQP LTPS 481 160204 G Protein- Coupled Receptor RTA AX136399 atgcgggttc tgcttccaaa gccatctctt ccagcaggag agggctctac tctgagctcc A tattttccaa ggctccgggc cgcgctcggc gctggcctgc tgccccggcg ggctccggcg ccggaggcgg gagtacacag aagagccctc cacaagaaga ggctcggcg gatcaggaca gctgcaggtg ggtgtgcaga ctggtgagct gccagcagg gccagcagc gccagcctg gagatggctg gaaactgctc ctgggaggcc catccggga caggagaac gatgtgctt ggcctgagcg agggcccgga actctacagc cggggcttcc tgacctcga gcagatcgcg atgctgccgc ctccggccgt catgaactac atctctctgc tctctgctt gtgtggcctg gtgggcaacg ggctggtcct ctggttttcc ggcttctcca tcaagaggaa ccccttctcc atctacttcc tgacctggc cagcgccgat gtgggtctacc tcttcagcaa ggcgtgttcc tccatctga acacgggggg ctctctggcg acgtttggcg actacatccg cagcgtgtgc cgggtcctgg ggctctgcat gttccttacc ggcgtgagcc tctgcccgc cgtcagcgcc gagcgtcg cctcggtcac ctccccgcg ttgtactggc gccggcgcc caagcgctg tcggccgtgg tgtgcgctt gctgtgggtc ctgtccctcc tggtcacctg cctgcacac tacttctcg tgttcttgg ccgcggggc cccggcgcg cctgcaggca catggacatc ttcctggga tctctctgt cctgctctgc tgcccgctca tgggtgtgct ctgctggcc ctcatctgc acgtggagtg ccgggcccga cggcgccagc gctctgcaa gctcaaccac gtcatctgg ccatggctc cgtcttctcg gtgtctcca tctacttag gatcgactgg ttcctcttct ggtcttcca gatcccgcc ccttccccg agtacgtcac tgacctgtgc atctgcatca acagcagcg caagcccatc gtctactcc tggcggggag ggacaagtgc cagcgctgt ggagccgct cagggtgtgtc ttccagcggg cctgcccga cggcgctgag ctgggggag cggggggag cagcccaac acagtacaa tggagatga gtgtccccg gggaacgct cctgagactc cagcgcttg aggagcagg ggaggaagc ggcctccaa accttgcg ttgggacagg aatgggcac tgccttctag tccatacagg agaagaaga tctgttctct ctctcgggc ctcttctcc ctgggctggg gactccagg gtggctggga gactgggag ccaccagaa acagacctgt ggccccg cggctcccc accattctg ctcccctaga gaccttctgt acagaagtg ccccgagtg gtggggcccc tcttgcct aggctggtg gtaaaagaga ggaggtcaac accagccta gccacctctg cctcttgggt	Homo sapiens
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482	160204	G Protein-Coupled Receptor RTA	CAC39840.1	<p>           MAGNCSWEAH PGNRNRMCPG LSEAPELYSR GFLTIEQIAM LPPAVMNYI FLLCLCGLV P            GNGLVWFFG FSIKRNPFSI YFLHLASADV GYLFSKAVFS ILNTGGFLGT FADYIRSVCR            VLGLCMFLTG VSLLPVSAE RCASVIFPAW YWRRRPKRLS AVVCALLWVL SLLVTCILHNY            FCVFLGRGAP GAACRHMDF LGILLFLCC PIMVLPCLAL ILHVECRARR RQSAKLNHV            ILAMVSVELV SSIYLGIDWF LFWVFIQIPAP FPEYVTDLCI CINSSAKPIV YFLAGRDKSQ            RLWEPLRVVF QRALRDGAEL GEAGGSTPNT VTMEMQCPPG NAS         </p>	Homo sapiens
483	160206	G Protein-Coupled Receptor GPR32	NM_001506	<p>           atgaatgggg tctcggaggg gaccagaggc tgcagtgaca ggcaacctgg ggctctgaca A            cgtgatcgct cttgttccag gaagatgaac tcttccggat gcctgtctga ggagtgggg            tccctccgcc cactgactgt ggttatectg tctgcgtcca ttgtcgtcgg agtgcgtggc            aatgggtggg tgcgtggat gactgtcttc cgtatggcac gcacgggtctc caccgtctgc            ttcttccacc tggcccttgc cgtattcatg cctcactagt cctgcccc tgccatgtac            tatattgtct ccaggcagtg gctcctcggg gagtggggcct gcaaacctca catcacctt            gtgttccca gctactttgc cagtaactgc ctccttgtct tcatctctgt ggaccgttgc            atctctgtcc tctacccctg ctgggcccgt aaccaccgca ctgtgcagcg ggcgagctgg            ctggccttgg ggggtgtggt cctggccgcc gccttgtgct ctgcgcacct gaaattccgg            acaaccagaa aatggaatgg ctgtacgcac tgcactttgg cgttcaactc tgacaaatgag            actgcccaga ttgtgattga aggggtcgtg gagggacaca ttataggagc cattggccac            ttccctgtgg gcttccctgg gcccttagca atcataggca cctgcgccc cctcatccgg            gccaaactct tgcgggaggg ctgggtccat gccaaaccggc ccaagaggct gctgctgggtg            ctggtagcgg ctttctttat cttctggtec cgttttaacg tgggtgctgt ggtecatctg            tggcgacggg tgatgctcaa ggaatctac cacccccggg tgcgtgctat cctccaggct            agctttgct tgggctgtgt caacagcagc ctcaacccct tctctacgt cctcgttggc            agagatttcc aagaaaagt ttctccagtct ttgacttctg cctggcgag ggcgtttgga            gaggagagt ttctgtcatc ctgtccctg ggcaacgcc cccgggaatg a            MNGVSEGRG CSDRQPGVLT RDRSCSRKMN SSGCLSEEVG SLRPLTVVIL SASIVGVLG P            NGLVLMWTF RMARTVSTVC FFHLALADFM ISLSLPIAMY YIVSRQWLLG EWACKLYITF            VFLSYFASNC LLVFISVDRG ISVLYPVMAL NHRTVQRASW LAFGVWLLAA ALCSAHLKFR            TTRKWNCGTH CYLAFNSDNE TAQIWIEGVV EGHIIGTIGH FLGLFLGPLA IIGTCAHLIR            AKLLREGVWH ANRPKRLLLV LVSAFFIWS PFNVLLVHL WRRVLMKEIY HPRMLLIQA            SFALGCVNSS INPFLYVFG RDFQEKFFQS LTSALARAFG EEEFLSSCPR GNAPRE            cagcctccct ctcccacctc tgcctgccc ctcctcttgc tctagctgt gtcaggagct A            gactgcctcc agggctgaa tctgtgtctc cctctgtgcc cagagcccca cgatgtcggc         </p>	Homo sapiens
484	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	<p>           MAGNCSWEAH PGNRNRMCPG LSEAPELYSR GFLTIEQIAM LPPAVMNYI FLLCLCGLV P            GNGLVWFFG FSIKRNPFSI YFLHLASADV GYLFSKAVFS ILNTGGFLGT FADYIRSVCR            VLGLCMFLTG VSLLPVSAE RCASVIFPAW YWRRRPKRLS AVVCALLWVL SLLVTCILHNY            FCVFLGRGAP GAACRHMDF LGILLFLCC PIMVLPCLAL ILHVECRARR RQSAKLNHV            ILAMVSVELV SSIYLGIDWF LFWVFIQIPAP FPEYVTDLCI CINSSAKPIV YFLAGRDKSQ            RLWEPLRVVF QRALRDGAEL GEAGGSTPNT VTMEMQCPPG NAS         </p>	Homo sapiens
485	160210	G Protein-Coupled Receptor	NM_004778	<p>           atgaatgggg tctcggaggg gaccagaggc tgcagtgaca ggcaacctgg ggctctgaca A            cgtgatcgct cttgttccag gaagatgaac tcttccggat gcctgtctga ggagtgggg            tccctccgcc cactgactgt ggttatectg tctgcgtcca ttgtcgtcgg agtgcgtggc            aatgggtggg tgcgtggat gactgtcttc cgtatggcac gcacgggtctc caccgtctgc            ttcttccacc tggcccttgc cgtattcatg cctcactagt cctgcccc tgccatgtac            tatattgtct ccaggcagtg gctcctcggg gagtggggcct gcaaacctca catcacctt            gtgttccca gctactttgc cagtaactgc ctccttgtct tcatctctgt ggaccgttgc            atctctgtcc tctacccctg ctgggcccgt aaccaccgca ctgtgcagcg ggcgagctgg            ctggccttgg ggggtgtggt cctggccgcc gccttgtgct ctgcgcacct gaaattccgg            acaaccagaa aatggaatgg ctgtacgcac tgcactttgg cgttcaactc tgacaaatgag            actgcccaga ttgtgattga aggggtcgtg gagggacaca ttataggagc cattggccac            ttccctgtgg gcttccctgg gcccttagca atcataggca cctgcgccc cctcatccgg            gccaaactct tgcgggaggg ctgggtccat gccaaaccggc ccaagaggct gctgctgggtg            ctggtagcgg ctttctttat cttctggtec cgttttaacg tgggtgctgt ggtecatctg            tggcgacggg tgatgctcaa ggaatctac cacccccggg tgcgtgctat cctccaggct            agctttgct tgggctgtgt caacagcagc ctcaacccct tctctacgt cctcgttggc            agagatttcc aagaaaagt ttctccagtct ttgacttctg cctggcgag ggcgtttgga            gaggagagt ttctgtcatc ctgtccctg ggcaacgcc cccgggaatg a            MNGVSEGRG CSDRQPGVLT RDRSCSRKMN SSGCLSEEVG SLRPLTVVIL SASIVGVLG P            NGLVLMWTF RMARTVSTVC FFHLALADFM ISLSLPIAMY YIVSRQWLLG EWACKLYITF            VFLSYFASNC LLVFISVDRG ISVLYPVMAL NHRTVQRASW LAFGVWLLAA ALCSAHLKFR            TTRKWNCGTH CYLAFNSDNE TAQIWIEGVV EGHIIGTIGH FLGLFLGPLA IIGTCAHLIR            AKLLREGVWH ANRPKRLLLV LVSAFFIWS PFNVLLVHL WRRVLMKEIY HPRMLLIQA            SFALGCVNSS INPFLYVFG RDFQEKFFQS LTSALARAFG EEEFLSSCPR GNAPRE            cagcctccct ctcccacctc tgcctgccc ctcctcttgc tctagctgt gtcaggagct A            gactgcctcc agggctgaa tctgtgtctc cctctgtgcc cagagcccca cgatgtcggc         </p>	Homo sapiens

Receptor  
GPR44  
(CRTH2)

caacgccaca ctgaagccac ttgtcccat cctggagcag atgagccgtc tcagagcca  
cagcaacacc agcatccgct acatcgacca cgcggccgtg ctgctgcacg ggctggcctc  
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tggatgaaat gtcagtggaa gaagcagatg agaaactctt gagatcttgg tctgtgttt

486	160210 G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	<p> ttctgccac caaaggccag ggtcactgaa ggctctggcc acagcaggtg ctgagcaaaag  ggaacagtga ggtgcccagc tagctgcaga gccacctgt gttgacacct cgccccctgct  ccctcccatc ccttccccct ttactcatag cacttcccc cctgacacag tggcgcatctt  tgcttggtta ttatgttttc tctccatcag aatgaaagct cctcagggc agggactttg  gtctattgtc tgtatttgcc ggtgcctagg attgtgctg tatgcaacag gactcaata  aatattttg ctgtagactg  MSANATLKPL CPILQMSRL QSHSNTSIRY IDHAAVLHGH LASLLGLVEN GVILFVVGCR P  MRQTAVTTWV LHLALSDLLA SASLPFFTYF LAVGHSWELG TTFCKLHSSI FFLNMFASGF  LLSAISLDRC LQVVRPWAQ NHRVAAAHK VCLVLWALAV LNTVPYFVER DTISRLDGR  MCYNNVLLN PGDRDATCN SRQAALAVSK FLIAFLVPLA IIASSHAAYS LRLQHRGRRR  PGRFVRLVAA VVAAPALCWG PYHVFSLLEA RAHANPLRIP LVWRGLPFVT SLAFFNSVAN  PVLVLTCPD MLRKLRSLR TVLESVLVDD SELGGAGSSR RRRSTSARS ASPLALCSRP  EPRGPAPLL GWLLGSCAAS PQTGPLNRAL SSTSS  atgaatgaat ccaggtggac tgaatggagg atcctgaaca ttagcagtggt cattgtgaat A  gcgtccgagc gtcactcctg ccactctgga ttggccact acagtgtggt ggtgtctgc  atcttcgaga cagtgttat tgtgtgctg acatttctga ttattgctgg gaactcaaca  gttatcttg ccttcattg tgcctcactg ttacatcatt atactaccag ctatttcatt  cagacgatgg catatgctga tctttcgtt ggattagct gcttgggtcc tactctgtca  ctctccact actccacag tgcacacag tcatcaact gccgggtttt tggatatatac  atctcagttc taaaaagtgt ttctatggca tgtcttgctt gcacatcagt ggtatcgttat  cttgcaataa ccaagcctct tctctacaat caactgtgca cccctgtgcg cttgagaatt  tgcatattt tgatctgat ctactcctg ctaatttct tgccttctt ttttggctgg  gggaaacctg gttaccatgg tgacattttt gaatggtgtg ccactgtctt gctcaccagt  gcctatttta ctggctttat tgtttgctta ctttatgctc ctgctgcctt tgttgtctgc  ttcacctact tccacatttt caaaatttgc cgtcagcaca ccaaagat aatgaccga  agagcccgat tccctagtca tgaggtagat tcttccagag agactggaca cagccctgac  cgtcgctacg ccattgtttt gtttaggata accagtgtat ttatatgct gtggctccc  tatataattt acttcttct agaaagctcc cgggtcttgg acaatccaac tctgtccttc  ttaacaaact ggcttgcatg aagtaatagt tttgttaact gtgtaataa cagcctctcc  aacggcgctt tccggctagg cctccgaaga ctgtttgaga caatgtgcac atcctgtatg  tgtgtgaagg atcaggaagc caagaaccc aaacctagga aacgggctaa ttcttgctcc  attga </p>	Homo sapiens
487	160212 G Protein-Coupled Receptor GPR52	NM_005684	<p> atgaatgaat ccaggtggac tgaatggagg atcctgaaca ttagcagtggt cattgtgaat A  gcgtccgagc gtcactcctg ccactctgga ttggccact acagtgtggt ggtgtctgc  atcttcgaga cagtgttat tgtgtgctg acatttctga ttattgctgg gaactcaaca  gttatcttg ccttcattg tgcctcactg ttacatcatt atactaccag ctatttcatt  cagacgatgg catatgctga tctttcgtt ggattagct gcttgggtcc tactctgtca  ctctccact actccacag tgcacacag tcatcaact gccgggtttt tggatatatac  atctcagttc taaaaagtgt ttctatggca tgtcttgctt gcacatcagt ggtatcgttat  cttgcaataa ccaagcctct tctctacaat caactgtgca cccctgtgcg cttgagaatt  tgcatattt tgatctgat ctactcctg ctaatttct tgccttctt ttttggctgg  gggaaacctg gttaccatgg tgacattttt gaatggtgtg ccactgtctt gctcaccagt  gcctatttta ctggctttat tgtttgctta ctttatgctc ctgctgcctt tgttgtctgc  ttcacctact tccacatttt caaaatttgc cgtcagcaca ccaaagat aatgaccga  agagcccgat tccctagtca tgaggtagat tcttccagag agactggaca cagccctgac  cgtcgctacg ccattgtttt gtttaggata accagtgtat ttatatgct gtggctccc  tatataattt acttcttct agaaagctcc cgggtcttgg acaatccaac tctgtccttc  ttaacaaact ggcttgcatg aagtaatagt tttgttaact gtgtaataa cagcctctcc  aacggcgctt tccggctagg cctccgaaga ctgtttgaga caatgtgcac atcctgtatg  tgtgtgaagg atcaggaagc caagaaccc aaacctagga aacgggctaa ttcttgctcc  attga </p>	Homo sapiens
488	160212 G Protein-Coupled Receptor GPR52	NP_005675.1	<p> MNESRWTEWR ILNMSSGIVN ASERHSCPLG FGHYSVVDVC IFETWIVLL TFLIAGNLT P  VIFAFHCAPL LHHYTSYFI QTMAYADLFV GVSCLVPTLS LLHYSTGVHE SLTCRVFGYI  ISVLKSVSMA CLACISVDRI LAITKPLSYN QLVTPCLRRI CIILIIWYSC LIFLPSFFGW  GKPGYHGDI FEWCATSWLTS AYFTGFIVCL LYAPAAFFVC FTYFHFKIC RQHTKEINDR  RARFPSHEVD SSRETHSPD RRYAMVLFRI TSVFVLMWLP YIIYFLLESS RVLDPNPTLSF  LTTWLAVSNS FCNCVIYSLN NGVFRGLRLR LFETMCTSCM CVKDQEAQEP KPRKRANCS  I </p>	Homo sapiens
489	160217 G Protein-Coupled	NM_005683	<p> atgagtcagc aaacaccag tggggactgc ctgtttgacg gtgtcaacga gctgatgaaa A  accctacagt ttgcagtcca catccccacc ttgcgtcttg gctgtctct caacctgctg </p>	Homo sapiens

490	Receptor GPR55	160217	G Protein- Coupled Receptor GPR55	NP_005674.1	gcatccatg gcttcagcac cttccttaag aacaggtggc ccgattatgc tgcacacctc atctacatga tcaacctggc agtctttgac ctgctgctgg tgctctccct ccattcaag atggtcctgt ccagggtaca gtcccccttc cgtccctgt gcacctggt ggagtgcctt tacttcgtca gcatgtacgg aagcgtcttc accatcgtct tcatcagcat ggaccggttc ttggccatcc gttaccctgt actggtgagc cactcctgct ccccgagaa atctttggga tctgcatgca caatctgggt cctggtgtgg accggaagca tccctatcta cagtttccat gggaaagtgg aaaaatacat gtgcttccac aacatgtctg atgatacctg gagcgccaag gtcttcttcc cgtggaggt gtttggtctc ctccttccca tgggcatcat gggcttctgc tgctccagga gcatccacat cctgctgggc cgcgagacc acaccagga ctgggtgcag cagaaagcct gcatctacag catcgagcc agcctggctg tattcgtggt ctccttctc ccagtcacc tgggttctt cctgcagttc ctggtgagaa acagctttat cgtagagtgc agagccaagc agagcatcag cttcttcttg caattgtcca tgtgttctc caatgtcaac tgctgcctgg atgtttctg ctactacttt gtcataaag aattccgcat gaacatcagg gcccaccgc cttccaggt cagctggtc ctgcaggaca ccacgatctc ccggggctaa IYMINLAVFD LFDGVNELMK TLQFAVHIPT FVLGLLNL AIHGFSTFLK NRWPDYAATS P LAIRYPLLVS HSGPPGRSLG SACTIWLVM TGSIPYSH GKVEKYMCFH NMSDDTWSAK VFEPLEVFGE LLPMGIMGFC CSRSIHLLG RRDHTQDWVQ QKACIYSIAA SLAVFVVSFL PVHLGFFLQF LVRNSFIVEC RAKQSISFFL QLSMCFSNVN CCLDVFCYF VIKEFRNIR AHRPSRVQLV LQDTTISR	Homo sapiens
491	G Protein- Coupled Receptor GPR35	160219	G Protein- Coupled Receptor GPR35	NM_005301	atgaatggca cctacaacac ctgtggctcc agcgacctca cctggcccc agcatcaag A ctgggtctct acgctactt gggctcctg ctggtgctag gctgctgct caacagcctg gcgtctggtg tgttctgctg ccgcatgcag cagtggacgg agaccgcat ctacatgacc aacctggcgg tggcgacct ctgctgctg tgcacctgc ccttcgtgct gcactccctg cgagacacct cagacacgc cgtgtgccag ctctcccg gcatctacct gaccaacagg tacatgagca tcagcctggt cagggccatc gccgtggacc gctatgtggc cgtgcggcac ccgtgcgtg ccgcgggct ggggtcccc aggcaggctg cggccgtgtg cgcggtcctc tgggtgctgg tcacgggctc cctggtggct cgtgggtcc tggggattca ggaggcggc ttctgcttca ggagcaccg gcacaaattc aactccatgc ggttcccgct gctgggattc tacctgccc tggcgtggt ggtcttctg tccctgaag tggtagctgc cctggcccc aggccacca ccgactggg gcaggcagag gccaccgca agctgcccc catggtctg gccaacctcc tgggttctg ggtctgctc ctgccccgc acgtgggct gacagtgcg ctgcagtg gctggaacgc ctgtgccctc ctggagacga tccgtcgcgc cctgtacata accagcaagc tctcagatgc caactgctgc ctggagcga tctgtacta ctacatggc aaggagtcc aggagcgtc tgcactggc cctgcctcc gctgtaagg ccacaaaagc caggactctc tgtcgtgac cctgcctaa	Homo sapiens
492	G Protein- Coupled Receptor GPR35	160219	G Protein- Coupled Receptor GPR35	NP_005292.1	MNGTYNTCS SDLTWPPAIK LGFYAYLGLV LVLGLLNL ALWVFCCRMQ QWTETRIYMT P NLAVADLCLL CTLPFVLHSL RDTSDTPLCQ LSQGIYLTNR YMSISLVTAI AVDRYVAVRH PLRAGLRSP ROAAVCAVL WVLVIGSLVA RWLIGIQEGG FCFRSTRHNF NSMRFPLLGF YLPLAVVFC SLKVTTALAQ RPPTDVQAE ATRKAARMVW ANLLVFVCF LPLHVGLTVR LAVGNACAL LETIRRALYI TSKLSDANCC LDAICYMYMA KEFQASALA VAPRAKAHKS	Homo sapiens

493	160221 G Protein-Coupled Receptor GPR27	NM_018971	QDSLCTLA	atggcgaacg cgagcgagcc ggggtggcagc ggcggcgggcg aggcggcgccg cctgggctc A	Homo sapiens
				aagctggcca cgctcagcct gctgctgtgc gtgagcctag cgggcaacgt gctgttcgcg	
				ctgctgatcg tgcgggagcg cagcctgcac cgcgccccgt actacctgct gctcgacctg	
				tgcctggccg acgggctcg cgcgctgcc tgcctcccg cgtcatgct ggcggcgcg	
				cgtgcggcg cgcggcggg ggcgcgcgc ggcgcgctgg gctgcaagct gctgccttc	
				ctggccgcgc tctctgctt ccacgcgcg ttcctgtgc tggcgctggg cgtcacccgc	
				tacctggcca tgcgcacca cgccttctat ccagagcgcc tggccggctg gccgtgcgc	
				gccatgctgg tgtgcgcgc ctgggcgctg gcgctggcg cgccttccc ccagtgctg	
				gacggcggtg gcgacgacga ggacgcgcg tgcgccccg agcagcgcc cgacggcgcc	
				cccggcgcgc tgggcttctt gctgctgctg gccgtggtgg tggcgccac gcacctcgtc	
				tacctcgcgc tgccttctt catccacgac cgcgcgaaga tgcggccgc gcgcctggtg	
				ccgcgcgcca gccacgactg gacctccac ggccggggcg ccaccggcca ggcgccgccc	
				aactggacgg cgggcttcgg ccgcggggccc acgcgcggcg cgttgttggg catccggccc	
				gcagggcggg gccgcggcg cgcgcgcctc ctctgtgtgg aagaattcaa gacggagaag	
				aggctgtgca agatgttcta cgcgctcacg ctgctcttcc tgcctctctg gggccctac	
				gtcgtggcca gctacctcg ggtcctggtg cggcccgggc ccgtcccca ggctacctg	
				acggcctccg tgtggctgac ctgcgcgag gccggcatca acccgctgt gtgcttctc	
				ttcaacaggg agctgaggga cgtcttcagg gccagttcc cctgctgcca gagcccccg	
				accacccagg cgacctatcc ctgcgacctg aaaggcattg gttatga	
494	160221 G Protein-Coupled Receptor GPR27	NP_061844.1	MANASEPGGS	CLADGLRALA CLPAVMLAAR RAAAAGAPP GALGCKLLAF LLIVRSLH RPYLLLLDL P	Homo sapiens
				YLAIAHREY AERLAGWPCA AMLVCAAWAL ALAAFPVL DGGGDEDEDAP CALEQRPDGA	
				PGALGFLLL AVVVGATHLV YLRLLFFIHD RRKMRPARLV PAVSHDWFH GPGATGQAAA	
				NWTAGFGRGP TTPALVGIRP AGPGRGARRL LVLEEFTEK RLCKMFYAVT LLFLLWGPY	
				VVASYLRLIV RPAVPQAYL TASVWLTFQA AGINPVVCFI FNRELRDCFR AQFPCCQSPR	
				TTQATHPCDL KGIGL	
495	160222 G Protein-Coupled Receptor GPR72	NM_016540		atggtccctc acctttgtct gctctgtctc ctcccttgg tgcgagccac cgagccccac A	Homo sapiens
				gaggggccgg ccgacgagca gaggcggag cgggccccgg ccgtgccccaa tgcctcgccac	
				ttcttctctt ggaacaacta cacttctcc gactggcaga actttgtggg caggaggcgc	
				tacggcgctg agtccagaa cccacgggtg aaagccctgc tcattgtggc ttactccttc	
				atcattgtct tctcactctt tggcaacgtc ctggtctgtc atgtcatctt caagaaccag	
				cgaatgcact cggccaccag cctcttcac gtcaacctgg cagttgccga cataatgac	
				acgctgctca acacccctt cactttggtt cgtttgtga acagcacatg gatatttggg	
				aagggcattg gccatgtcag ccgctttgcc cagtactgt cactgcactg ctgagcactg	
				acactgacag ccattgcggt ggatcgccac caggtcatca tgcacctt gaaaccccg	
				atctcaatca caaagggtgt catctacatc gctgtcatct ggacctggc tacgttcttt	
				tcaactccac atgctatctg ccagaaatta tttaacctca aatacagtga ggacattgtg	
				cgctccctct gcctgccaga ctccctgag ccagctgacc tcttctggaa gtacctggac	
				ttggccacct tcatctgtct ctacatctg cccctcctca tcatctgtt ggcctacgt	

496	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	<p> cgtgtggcca agaaactgtg gctgtgtaat atgatggcg atgtgaccac agagcagtag  tttgccctgc ggcgcaaaaa gaagaagacc atcaagatgt tgatgctggt gtagtccctc  tttgccctct gctggttccc cctcaactgc tacgtccctc cctgtgccag caaggtccatc  cgaccaaca atgcctcta tttgccttc cactggttg aacttcagga ttgagctaaa ggcattactg  aacccttca tatactgctg gctgaacgag caagcctcag gaggcgggc aacctcccc agtccctcc  agcatgtgtc aaagacctcc cctggacaga gaagaatgat ggcagagggg ctccccctgc caataacctc  ttcagggttg cccaactcca gtctgggaag acagacctgt catctgtgga accattgtg  ctgccacct agaagaggtt gggaagaggg agtgggaggg gtctgtctcc acctaggga  acgatgagt ggaaagaga gcctattctc acacatgac ttcagagtgc tggaaacaca ctctgcaga  aggctgtagg actctgaat tctaggaaa ctgtccagcc tctagcccc atgtgatgtg  aaaactaaaa ggcaccacca actagacatg tgttcaataa tccccatcta agaaacactg  ggaggcacag cagcctgtat ctctgaggaa gaggagcgag gacaacgttg gccagatgg  gggtgaatc attcaactgc ctccatctgt ggggcagctg ctgccttaca gcccttccta  ctagactgag catccggaag gagacctaaa tcatacttg ggtgtggtga ccagatgca  cagagctctg ctgaaacag gtacacgggc cagggaaatg ccagcaa  cagagctctg ctgaaacag gtacacgggc cagggaaatg ccagcaa  cagagctctg ctgaaacag gtacacgggc cagggaaatg ccagcaa </p>	Homo sapiens
497	160223	G Protein-Coupled Receptor G2A	NM_013345	<p> gggaggggtg cgaggctagc cagcaggcg gggcccttggg tcattttaaa ctctcagagt A  gaacgtcttg ataggaccga caagacgcat gacatgtact tagatagctt atcttagagc  cacactgaga ttggaacccg caaaatatgc caggaggagaa ggtgagcaag ggacacgaca  ctcaccgga taaaccaac aagcgcagcg aggtgtggg gaaacccggan ccctgcacac  cgccggggga aggtgggcn ccgccaccac cgtggaagaa cagcgcggan gcaccccacg  agatgagacg gaactgccgt gagatccagc aatnccnact gtgggtctga ccaggatan  cgaaagcag ggaactgaac agcctcctc atgttcttga caccgtcatt ctacagcagct  cagctaaagg acagaggcag ccgagcgtct gtcagcagag tcgtggctga gcagaacacg  ccacacgcca cagccacac ggcacacgtg caggattgct caagatggaa gggcacagt  gaatatatat atattttat attttggcg agacctgga ggcacactg aatacaatgg  aataccatcc cgccttgaag aggaaggaa atctctggac acgtgcaac aggagggagc  ttgaggacac tgtgtgagt ggagcacgtg agacacgaa ggacacacgc tgaagacacg  cagagatgcc caccacgtg gggaggtgac agggagccc agcgacaga gacaaagtgg  aatggaggcc tgggggctgg gagcaaatgc ggagcagtg ctctctggg cagagtctcc  gtttgggaag atgagaaggt tctgccgac gatgctggcg atggttgac aagaatgtga  atgtgcccga tgctactgaa aaacggttac aatggaaacg ccacccagc gaccaccact  gccccgtggg cctccctggg cctctccgccc aagacctgca acaacgtgtc ctctgaagag </p>	Homo sapiens



498	160223	G Protein-Coupled Receptor G2A	NP_037477.1	<p>agcaggatag tcctgggtcgt ggtgtacagc ggggtgtgca cgctgggggt gcccggcaac</p> <p>tgcctgactg cgtggctggc gctgctgcag gtactgcagg gcaacgtgct gcccgtctac</p> <p>ctgctctgcc tggcactctg cgagctgctg tacacaggca cgctgccact ctgggtccatc</p> <p>tatatccgca accagcaccg ctggacccta ggcctgctgg cctgcaaggt gaccgcctac</p> <p>atcttcttct gcaacatcta cgtcagcatc ctctctctgt gctgcatctc ctgcgaccgc</p> <p>ttcgtggccg tgggttacgc gctggagagt cggggccgcc gccgcccagg gaccgcctac</p> <p>ctcatctccg cctgcactct catctcgtc gggatcgttc actaccgggt gtccagacg</p> <p>gaagacaagg agacctgctt tgacatgctg cagatggaca cgaggattgc cgggtactac</p> <p>tacgccaggt tcaccgttgg ctttgccatc cctctctcca tcctgcctt caccaccac</p> <p>cggattttca ggagcatcaa gcagagcatg ggcttaagcg ctgccagaa ggccaagggtg</p> <p>aagcactcgg ccctgcgggt ggtgtgcatc ttctagtct gcttcgccc gtaccacctg</p> <p>gttctctcgt tcaaaagccg tgccttttcc tactacagag gagacaggaa cgccatgtgc</p> <p>ggcttgagg aaaggctgta cacagcctct gtggtgttcc tgtgctgtc cacggtgaac</p> <p>ggcgtggctg acccattat ctacgtgctg gccacggacc attcccgcca agaagtgtcc</p> <p>agaatccata aggggtggaa agagtgtgct atgaagacag acgtcaccag gctcaccac</p> <p>agcagggaca ccgaggagct gcagtcgcc gtggcccttg cagaccacta cacttctcc</p> <p>aggccctgc accaccagg gtcaccatgc cttgcaaga ggtgattga ggaagtctgc</p> <p>tgagccact gtgtggcagg gggatggcag ttgggggggtc ctggggccag caatgtggtt</p> <p>cctgtgcact gagccacca gccacagtgc ccattgcccc tctggaagac aaactaccaa</p> <p>tttctcgttc ctgaagccac tccctcctg accactggcc ccangcttcc ccacatggaa</p> <p>ggtggctgca tgccaagggg aagagcgaca cctccaggct tccggggagcc canagagcat</p> <p>gtggcangca gtggggcctc ttcatcatca nctgctcgt ctggctccct tggctgtggg</p> <p>cangtacacc cctgctggca gaagtacctg gtggtgcccc tgttcgcatc agtggcgatg</p> <p>actttatttg cggagcattt ctgcaagcgt tgcctggatg cgggtgtgca ttgtgggccc</p> <p>tctgggctcc tgcctcaaaa tgtcagtgag caccatgctg gaagtaccca tcactgtggc</p> <p>agcggccagg aaggcatagg gcancctacc acctccaaang gggcangcgc cctcatctgg</p> <p>ggttgggt</p>	Homo sapiens
499	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	NM_004767	<p>CLTAWLALQ VLOGNVLAIV NGNATPVTTT APWASLGLSA KTCNNVSFEE SRIVLVVVS AVCTLGVPAN P</p> <p>IFFCNIIYVSI LFLCCISCDR FVAIVYALE RRRRRRTAI LISACIFILV GIVHYPVFQT</p> <p>EDKETCFDML QMDSRIAGYY YARFTVGFAI PLSIIAFTNH RIFRSIKQSM GLSAAQKAKV</p> <p>KHSAIAVVVI FLVCFAPYHL VLLVKAFAFS YYRGDRNAMC GLEERLYTAS VFLLCLSTVN</p> <p>GVADPIIYVL ATDHSRQEVRS RIHKGWKEWS MKTDVTRLTH SRDTEELQSP VALADHYTFS</p> <p>RPVHPGSPC PAKRLIEESC</p> <p>cggtgtacagg gggcccaaga gctgggctgg ctgtctctctg ctcatccagc catgcggtgg A</p> <p>ctgtggcccc tggctgtctc tcttgcctgtg attttggctg tggggctaag cagggtctct</p> <p>gggggtgccc cctgcacct gggcaggcac agagccgaga cccaggagca gcagagccga</p> <p>tccaagaggg gcaccgagga tgaggaggcc aagggcgctg agcagtatgt gcctgaggag</p> <p>tgggaggagt accccggcc cattcacct gctggcctgc agccaaacca gcccttggtg</p> <p>gccaccagcc ctaacccga caaggatggg ggcacccag acagtgggca ggaactgagg</p> <p>ggcaatctga caggggcacc agggcagagg ctacagatcc agaaccctt gstatccggtg</p>	Homo sapiens

500	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NP_004758.1	<p>accgagagct cctacagctg cctatgccatc atgcttcttg cgctggtggt gtttgcggtg</p> <p>ggcattgtgg gcaacctgtc ggtcatgtgc atcgtgtggc acagctacta cctgaagagc</p> <p>gcctggaact ccatccttgc cagcctggcc ctctgggatt ttctggtcct cttttctgc</p> <p>ctccctattg tcatcttcaa cgagatcacc aagcagaggc tactgggtga cgtttctgt</p> <p>cgtgccctgc ccttcatgga ggtctctct ctgggagctca cgaacttccg cctctgtgcc</p> <p>ctgggcattg accgcttcca cgtggccacc agcaccctgc ccaaggtgag gcccatcgag</p> <p>cggtgccaat ccatcctggc caagttggct gtcactggg tgggtccat gacgtggct</p> <p>gtgctgagc tctgtctgtg gcagctggca caggagcctg cccaccat gggaccctg</p> <p>gactcatgca tcatgaaac ctacgccgc ttgggtgtac ttgggtgct acttctgct gccatcctc</p> <p>acctaccaga agcccgcat gtggtgtgac ttgggtgct acttctgct gccatcctc</p> <p>ttcacagtca cctgccagct ggtgacatgg cgggtgcgag gccctccagg gaggaagtca</p> <p>gagtgcagg ccagcaagca cgagcagtg gagagccagc tcaacagcac cgtggtggc</p> <p>ctgaccgtgg tctacgcct ctgacccctc ccagagaacg tctgcaacat cgtggtggc</p> <p>tacctctcca ccgagctgac ccgccagacc ctggacctcc tgggcctcat caaccagttc</p> <p>tccacctct tcaaggcgc catcaccca gtgctgtcc ttgcatctg caggccgctg</p> <p>ggcaggcct tctggactg ctgctgtgc tctgtctgt aggagtgcg cgggctctg</p> <p>gagcctctg ctgccaatgg gtcggaacac aagctcaaga ccgaggtgtc ctctccatc</p> <p>tacttccaca agcccaggga gtacacccca ctctgcccc tgggcacacc ttgctgagc</p> <p>cccagtaggg gtgggaggg agggagagg cgccacccc gcggtgtct cgtgtctctt</p> <p>ccccataggt ctgtcttctg tgcctgtct gctgttagg gatggactg gtctctctg</p> <p>tcaaggttg ggaatccc</p>	Homo sapiens
501	160225	Sphingolipid Receptor Edg6	NM_003775	<p>gagtcagccc ccgggggagg ccatgaacgc cacggggacc ccggtggccc ccgagtctg A</p> <p>ccaacagctg gcggccggcg ggacagcgc gctcatgtt ctgcactaca accactcggg</p> <p>ccggtggcc ggccgggggg ggccggagga tggcgccctg ggggccctgc ggggctgtc</p> <p>ggtggccgc agctgcttgg tgggtctgga gaacttctg gtgctggcg ccatcaccag</p> <p>ccacatgcg tcgcgacgt ggttctacta ttgctgtgtg aacatcacg tgaagtacat</p> <p>gctcacggc gcgctacc tggccaacgt gctgctgtc gggggccgca ccttccgtct</p> <p>ggcggccgc cagtgttcc tacgggagg cctgctctc accgctctg ccgctccac</p> <p>cttcagcctg ctcttactg caggggagcg ctttgcacc atggtgcggc cggtggccga</p> <p>gagcgggccc accaagacca gccgctcta cggctctatc ggcctctgct ggtcgtggc</p> <p>cgcgtgctg gggatgctg ctttgcgtgg ctggaatgc ctgtgcgct ttgaccgctg</p> <p>ctccagcctt ctgcccctct actccaagcg ctacatctc ttctgcctg tgatcttcg</p>	Homo sapiens

502	160225	Sphingolipid NP_003766.1 Receptor Edg6	<p> cggcgctctg gccaccatca tggggcctcta tggggccatc ttcggcctgg tgcaggccag  cgggcagaag gcccacagcc cagcgcccg cgcgaaggcc cggcgccctgc tgaagacggt  gctgatgc ctgctggcct tcttggtgtg ctggggccca ctcttcgggc tctgctggc  cgacgtcttt ggtccaacc tctgggcca ggagtacctg cggggcatgg actggatcct  ggccctggcc gtcctcaact cggcggtcaa ccccatcatc tctcggctgg gcatgcgagg  ggtgtcaga gccgtgtca gcttcctcg gggccgtcga ggtcctacc ccaccgacag  gccggggac tgcctggccc gcttcgcgg gctccgctcg ctacgctttc ggtgcggga  ctctctgagg ccaagggaca gctttcgcg ctcgcgtcg ctacgctttc ggtgcggga  gccccgtcc agcatctcca gcgtgcggag catctgaagt tgcagctttg cgtgtggatg  gtgcagccac cgggtgcgtg ccaggcagg cctcctgggg tacaggaagc tgtgtgcacg  cagcctcgcc tgtatgggga gcagggaac ggacaggccc ccatggtctt cccggtggcc  tctcgggct tctgacgcca aatgggcttc ccatggtcac cctggacaag gaggtaacca  ccccacctcc ccgtaggagc agagagcacc ctggtgtggg ggcgagtggc tccccacaac  cccgcttcg tctgattctg gggaaagtccc gcccctctc tgggcctcag tagggctccc  aggctgcaag ggtggactg tgggatgcat gccctggcaa cattgaagtt cgatcatggt  aaaaa </p>	Homo sapiens
503	160228	T-Cell Death- Associated Gene 8 (GPR65)	<p> NM_003608 </p> <p> atgaacagca catgtattga agaacagcat gacctggatc actatttgtt tccatttgtt A  tacatctttg tgattatagt cagcattcca gccaatattg gatctctgtg tgtgtctttc  ctgcaaccca agaaggaaa tgaactagga atttacctct tcagtttgtc actatcagat  ttactctatg cattaaactc ccctttatgg attgattata cttggaataa agacaactgg  actttctctc ctgcttgtg caaaggaggt gcttttctca gtacatgaa gttttacagc  agcacagcat tctcacctg cattgccgtt gatcggtatt tggctgttgt ctaccctttg  aagttttttt tcccaaggac aagaagaatt gcactcattg tcagcctgtc catctggata  ttggaaacca tctcaaatgc tgtcatgttg tgggaagatg aaacagttgt tgaatattgc  gatgccgaaa agtctaattt tactttatgc tatgacaaat accctttaga gaaatggcaa  atcaacctca acttgttcag gactgtaca ggctatgcaa taccttttgt caccatcctg  atctgtaacc ggaagtcta ccaagctgtg cggcacata aagccacgga aacaaggaa  aagaagagaa tcataaaact acttgtcagc atcacagta cttttgtctt atgctttact  ccctttcatg tgatgttgtt gattcgtgc attttagagc atgctgtgaa cttcgaagac  cacagcaatt ctgggaagcg aacttacaca atgtatagaa tcacggttgc attaacaagt  ttaaattgtg ttgctgatcc aattctgtac tgttttgtta ccgaacacag agatatgat  atgtggaata tattaataa ctgcactggg aggtgtaata catcacaaag acaagaaaa  cgcatacttt ctgtgtctac aaagataact atggaattag aggtccttga gtag </p>	Homo sapiens

504	160228	T-Cell Death- Associated Gene 8 (GPR65)	NP_003599.1	NP_014322	160300	Encephalopsi n	Homo sapiens
505			MNSTCIEEQH DLDHYLFPIV YIFVIVISIP ANIGSLCVSF LQPKKESELG IYLFSLSLSD P				Homo sapiens
			LLYALTPLW IDYTWNKDNW TFPALCKGS AFLMYMKFYS STAFLTCAIV DRYLAVVYPL				
			KFFFLTRRI ALMVSLSIWI LETIFNAVML WEDETVEYC DAEKSNFTLC YDKYPLEKWQ				
			ININLFTCT GYAIPLVIL ICNRKVQAV RHNKATENKE KKRIIKLLVS ITVTFVLCFT				
			PFHVMILLRC ILEHAVNFED HNSNGKRTYT MYRITVALTS LNCVADPILY CFTVETGRYD				
			MWNILKFCTG RCNTSQQRK RILSVSTKDT MELEVLE				
			cgagcccccgc cgcaagctga ggcctccgc cgcgcaggcg cgccggcgcc gggccatgta A				Homo sapiens
			ctcgggggaac cgcagcggcg gccacggcta ctgggacggc ggcgggggcg cgggcgctga				
			ggggccggcg cgcgggggga cactgagccc cgcgcacctc ttcagccccc gacctacga				
			gcgcctggcg ctgctgctgg gctccattgg gctcctggcg gtccggaaca acctgctgg				
			gctcgtccct tactacaagt tccagcggct ccgacactcc actcacctcc tccctgggtcaa				
			catcagcctc agcgacctgc tgggtccct cttcggggtc acctttacct tccgtgtcccg				
			cctgaggaac ggctgggtgt gggacacctt gggctgcgtg tgggacgggt tttagcggcag				
			cctcttcggg attgtttcca ttgccacct ttgcacctg gctatgaac gttacattcg				
			cgtggtccat gccagagtga tcaatttttc ctgggcctgg agggccatta cctacatctg				
			gctctactca ctggcgtggg caggagcacc tctcctggga tggaaacaggt acatcctgga				
			cgtacacgga ctaggctgca ctgtggactg gaattccaa gatgccaaag attcctcctt				
			tgtgcttttc ttatttcttg gctgcctgggt ggtgccctg ggtgtcatag cccatttgcta				
			tggccatatt ctattttcca ttcgaatgct tccgtgtgtg gaagatcttc agacaattca				
			agtgatcaag attttaaaat atgaaaagaa actggccaaa atgtgctttt taatgatatt				
			cactctcctg gtctgttgga tgccttatat cgtgatctgc tcttggtgg ttaatgggtca				
			tggtcacctg gtcactccaa caatatctat tgtttcgtac cttcttgcta aatcgaaacac				
			tgtatacaat ccagtgattt atgtcttcat gatcagaaa gttcgaagat cctttttgca				
			gcttctgtgc ctccgactgc tgaggtgcca gaggctgct aaagacctac cagcagctgg				
			aagtgaatg cagatcagac ccattgtgat gtccagaaa gatggggaca ggccaaaagaa				
			aaaagtgact ttcaactctt cttccatcat ttttatcat accagtgat aatcactgtc				
			agttgacgac agcgacaaaa ccattgggggt ccaaagtgtg atgttaatcc agttcgtcc				
			tttgtaggaa tgaaggatgg caacgaaaag tggggcctta aattggatgc cacttttggga				
			ctttcatcat cctcctgaag aagaagtgtc tggaaataccc gtictatgta atatcaacag				
			aaccttggg tccagcagga aatccgaatt gccatatgc tcttgggcct caggaagagg				
			ttgaacaaaa acaaatctt ttaattcaac ggtgtcttta cataatgaaa aaaccacttg				
			tgcacacgat gggcatctaa catcatcatc ttctaagtgt ttggagattt tcaattcaaa				
			tatatttttt aaattactct attttccaa acacgtaatg catttttctc gaaaatacct				
			tactgtaaaa ataactgtcg cgtacacatg tgtgaagtgc ctagaacata ctgaattttt				
			tttgtactgt tggactctat tcagtgatcat gtcttatatc tgatcaagtt atcaaggaga				
			taattctaga atgaaaaaga aaatcctctt gttgaaaca aaagacgttt tataatgtgca				
			gtatgacaaa gaggagtctc agagacaact ttgaatcctt gtcagcctgg agaccagcac				
			cagaggaatc tacaaggcaa actcccatat atttgcttcc cccaaattgc tgccttaca				
			gactcaaaagc tcttttctt tgtttgttg tttcttaaa aatttactg tcttgtcga				
			tgtatatataa gccagggagt tctaagacgc cagctcttgg agatttgcct attccctgt				
			atttccaca tatatatatt atataccgc taataaattt atgtttgttt taaaaaaaa				

Accession	Gene	Protein	Species	Sequence
506	160300 Encephalopsi n		Homo sapiens	<p>aaaaaaaaaa</p> <p>MYSGNRSGGH GYWDGGAAG AEGPAPAGTL SPAPLFSPGT YERLALLLGS IGLLGVGNL P</p> <p>LVLVLYYKFQ RLRTPHLLL VNISLSDLLV SLFGVTFTFV SCLRNGWVD TVGCVWDGFS</p> <p>GSLFGIVSIA TLTVLAYERY IRVHARVIN FSWAWRAITY IWLYSLAWAG APLLGWNRVI</p> <p>LDVHGLGCTV DWKSKDANDS SFVLFLFLGC LVVPLGVIAH CYGHILYSIR MLRCVEDLQT</p> <p>IQVIKILKYE KKLAKMCFILM IFTFLVCWMP YVICFLVNV GHGHLVPTTI SIVSYLFAKS</p> <p>NTVYNPVIYV FMIRKFRSL LQLLCLRLR QPRAKDLPA AGSEMQRPI VMSQKGDGRP</p> <p>KKKVTFNSSS IIFIITSDS LSVDDSDKTI GVQSLMLIQV RPL</p>
507	160312 Sphingolipid Receptor Edg5		Homo sapiens	<p>atgggcagct tgtactcgga gtacctgaac ccaacaagg tccaggaaca ctataattat A</p> <p>accaagaga cgtggaac gcaggagacg acctccgcg aggtggcctc ggccttcac</p> <p>gtcatcctct ttgctgccat tctgttgaa aacctcttg ggtctattgc ggtggcccg</p> <p>aacagcaagt tccactggc aatgtacctg ttctgggca acctggcgc ctcgatcta</p> <p>ctggcaggcg tggccttcgt agccaatacc ttgtctctg gctctgtcac gctgaggtg</p> <p>acgcctgtgc agtggtttgc ccgggagggc tctgctcca tcacgtctc ggcctctgtc</p> <p>ttcagcctcc tggccatgc cattgagcg caagtggcca ttgccaaggt caagtgtat</p> <p>ggcagcgaca agagctgccg catgcttctg ctaactgggg cctcgtggct catctcgtg</p> <p>gtcctgggtg gctggccat ccttggctgg aactgcctgg gccacctga ggcctgctcc</p> <p>actgtcctgc ctctctacg caagcattat gtgctgtgcg ttgtgacct cttctccatc</p> <p>atcctgttgg ccctgtggc cctgtactg cgcattact gctgtgtccg ctcaagccac</p> <p>gctgacatgg ccgcccgca gacgtagcc cgtctcaaga cgtctaccat cgtctaggc</p> <p>gtctttatcg tctgtgtgtt gccgccttc agctactcc ttctggacta tgcctgtccc</p> <p>gtccactcct gcccgatcct ctacaaagc cactactttt tcgccgtctc caccctgaat</p> <p>tcctgtctca acccgtcat ctacacgtgg cgcagccggg acctgcggcg ggaggtgctt</p> <p>cgcccgctgc agtgcctggc gccgggggtg ggggtgcaag gacggaggcg ggtcgggacc</p> <p>ccggggccac acctcctgc actccgacg tccagctccc tggagagggg catgcacatg</p> <p>ccacgtcac ccagtttct ggaggccaac acggtggtct ga</p>
508	160312 Sphingolipid Receptor Edg5		Homo sapiens	<p>MGSLYSEYN PNKQEHVNY TKETLETQET TSRQVASAFI VILCCAIVE NLLVLIIVAR P</p> <p>NSKFHSAMYL FLGNLAASDL LAGVAFVANT LLGSVTLRL TPQWFAREG SASITLSASV</p> <p>FSLLAIAIER HVAIAVKVLY GSDKSCRMLL LIGASWLISL VLGGLPILGW NCLGHLEACS</p> <p>TVLPLYAKHY VLVVTFISI ILLAIVAIYV RIYCVVRSSH ADMAAPQTLA LLKTVTVLIG</p> <p>VFTVCWLPAP SILLDYACP VHSCPILYKA HYFFAVSTLN SLLNPVIYTW RSRDLRREVL</p> <p>RPLQCRWPGV GVQRRRVGT PGHLLPLRS SSSLERGMHM PTSPPTFLEGN TVV</p>
509	160314 G Protein-Coupled Receptor GPR103		Homo sapiens	<p>atgatctgct gcagtgctct gagccctagg attcatcttt cttttcaccc tagcctgact A</p> <p>ggcattgtat tagcaaatc atcactagac atcgtactac acgacacgta ctactgtgta</p> <p>gccactgctg ggggaaatgt taggcgctg cattgggtg gccccgcgtc ccgggagcgc</p> <p>acagcaatgc aggcgcttaa cattaccccg gagcagttct ctggctgctg cggggaccac</p> <p>aacctgacgc gggagcagtt catcgctctg taccggctgc gaccgctct ctacaccca</p> <p>gagctgccgg gacgcgcaa gctggccctc gtgctcacg gcgtgtctat cttegcctg</p> <p>gcactctttg gcaatgctct ggtgttctac gtggtgacct gcagcaaggc catgocacc</p> <p>gtcaccacaa tctttatctg ctcttggcg ctcaigtgacc tgcctcatc cttcttctg</p>

510	160314	G Protein- Coupled Receptor GPR103	ENSMPT2217 53	<p>atccccgtca ccatggtcca gaacatttcc gacaactggc tgggggggtgc tttcatttgc</p> <p>aagatgggtgc catttgtcca gtctaccgct gttgtgacag aaatcctcac tatgacctgc</p> <p>attgctgtgg aaaggcacca gggacttgtg catcctttta aaatgaagtg gcaatacacc</p> <p>aaccgaaggg ctttcacaat gctagggtg gctcgggtgg tggcagtcac cgtaggatca</p> <p>cccatgtggc acgtgcaaca acttgagatc aatatgact tccatatga aaaggaacac</p> <p>atctgctgct tagaagagt gaccagccct gtgcaccaga agatctacac caccctcac</p> <p>ctgtcatcct ctctctctg cctcttatgg aagaagaac gagctgtcat tatgatggg</p> <p>acagtgggtg ctctctttgc tgtgtgctgg gcacaaatcc atgtgtcca tatgatgatt</p> <p>gaatacagta attttgaaaa ggaatatgat gatgtcacaa tcaagatgat ttttgtatc</p> <p>gtgcaaatga ttggattttc caactccatc tgtatccca ttgtctatgc atttatgaat</p> <p>gaaaacttca aaaaaaatgt ttgtctgca gttgttatt gcatagtaaa taaaacctc</p> <p>tctccagcac aaaggcatgg aaattcagga attacaatga tgcggaagaa agcaaatgtt</p> <p>tcctcagag agaatccagt ggaggaaacc aaaggagaag cattcagtga tggcaacatt</p> <p>gaagtcaaat tgtgtgaaca gacagaggag aagaaaaagc tcaaacgaca tcttgctctc</p> <p>tttaggtctg aactggctga gaattctcct ttagacagt ggcattaa</p> <p>RVGDGSLRT IHGKEMSKIA RKKRAVIMM VTVALFAVC PLMVMILYS KIGYELWIKK P</p> <p>DDVTIKMIFA IVQIIGFSNS ICNPIVAFM NENFKKNVLS AVCYCIVNKT FSPAQRHGNS</p> <p>GITMRKKAK FSLRENPEVE TKGEAFSDGN IEVKLCQTE EKKKLKRHLA LFRSELAENS</p> <p>PLDSG</p>	Homo sapiens
511	160317	Neuropeptide FF 2 Receptor	NM_004885	<p>tctggagcca agtaatgggtg atactgatgc ttccttttct ttcgcgcgct cggattctga A</p> <p>gtttcacaaag aatgtacctg ggtgcccctt agcgggatat gaatagcttc ttcggaaacc</p> <p>cagcgccag ctggtgcctc ctgaaagt ctgctcatc tgcaccggac aaggaggcgg</p> <p>ggaggagcg cagagcaatc agctccagc agcggcgcg gccagcctgg agcggaaagcc</p> <p>tggagtggag cagcagtcct gcgggggaca gactcgctt gggattgagc cggcagactg</p> <p>cgaaaagtga ctggagccgg agcagggaca gaacctgttg ctgcagacgg ccttggtgga</p> <p>ttctggttcc tgcgcgcgac agggctcgcc gggagagggt catcatgaat gagaaatggg</p> <p>acacaaactc ttcagaaaaa tggcatccca tctggaatgt caatgacaca aagcatcatc</p> <p>tgtactcaga tattaatatt acctatgtga actactatct tcaccagcct caagtggcag</p> <p>caatcttcat tatttctac ttctgtatct tctttttgtg catgatggga aatactgtgg</p> <p>tttgctttat tgtaatgagg acaaaacata tgcacacagt cactaatctc ttcactttaa</p> <p>acctggccat aagtgaatta ctagtggca tattctgcat gcctataaca ctgctggaca</p> <p>atattatagc aggatggcca ttggaaaaa cgatgtgcaa gatcagtggga ttggtccagg</p> <p>gaatatctgt cgcagcttca gtctttacgt tagttgeaat tgcgttagat aggttccagt</p> <p>gtgtggtcta cctttttaa ccaaagctca ctatcaagac agcgtttgtc attattatga</p> <p>tcattctgggt cctagccatc accttatgt ctccatctgc agtaagtta catgtgcaag</p> <p>aagaaaaata ttaccagagt agactcaact ccagaataa aaccagtcca gtctactggt</p> <p>gccgggaaga ctggccaaat caggaaatga ggaagatcta caccactgtg ctgttttgcca</p> <p>acatctacct ggctccctc tccctcattg tcatcatgta tggaaaggatt ggaatttcac</p> <p>tcttcagggc tgcagttcct cacacaggca ggaagaacca ggagcagtg cactggtgtg</p> <p>ccaggaaaaa gcagaagatc attaagatgc tctgtattgt ggcctgtctt tttattctct</p>	Homo sapiens

512	160317	Neuropeptide FF 2 Receptor	NP_004876.1	catggctgcc cctgtggact ctaatgatgc tctcagacta cgctgacctt tctccaaatg aactgcagat catcaacatc tacatctacc cttttgcaca ctggctggca ttcggcaaca gcagtgtcaa tcccatcatt tatggtttct tcaacagagaa tttccgccgt ggtttccaag aagctttcca gctccagctc tgccaaaaa gagcaaaagcc tatggaagct tataccctaa aagctaaaag ccatgtgctc ataacacat ctaatcagct tgtccaggaa tctacatttc aaaacccctca tggggaacc ttgctttata ggaagaatgc tgaaaaaccc caacaggaat tagtgaatga agaattaaaa gaaactacta acagcagtagc gatttaaaaa gagctagtagt gataatccta actctactac gcattatata tttaaatcca ttgctttttg tggctttgca cttcaaatctt ttcaagaat gtcttaata aacattttac tgaaagccct ctctggcaaa aaaattaaaa ataaacaaaa atggtcataa gatcataaac aatcttatgt tgtataaaaa tacgtagagt gacttagaca tgtttgcatg aataaatata tttctagaga acagttaaaa aaaaaaaaa aaaaaa	SRQSGSLEW FINNEKWDN CMGNTVVC KISGLVQGIS VAVSVFTLVA YVRVRLNSQN YGRIGISLFR YADLSPNELQ IINIYIYPFA PMEAYTLKAK SHVLINTSNQ EI	Homo sapiens
513	160324	G Protein- Coupled Receptor GPR86/GPR94/ P2Y13	NM_023914	aacagtattt tccttttcaa cacatctatt gaaagtgttg gataaatgca ggatgttaat A atgctataaa cataaagtct gtttttaaaa aatagcattt gaaaaatcatg aagggtcttt tgttttcttt tgtttgtata tatgtttatt ggttaacaggt gacactggaa gcaatgaaca ccacagtgat gcaaggcttc aacagatctg agcgggtccc cagagacact cggatagtagc agctggattt cccagccctc tacacagtgg ttttcttgac cggcattcctg ctgaataactt tggtctctgt ggtgtttgtt cacatcccca gctcctccac cttcatcatc tacctcaaaa acacttttgt ggcgacttg ataatgacac tcatgcttcc ttcaaaaatc ctctctgact cacactggc accctggcag ctacagactt ttgtgtgtcg ttttcttctg gtgatatctt atgagaccat gtatgtgggc atcgtgctgt tagggctcat agcctttgac agattcctca agatcatcag acccttgaga aatatctttc taaaaaaaac tgtttttgca aaaaaggctc caatcttcat ctggttcttt ttgttcttca tctccctgcc aaatatgac ttgagcaaca aggaagcaac accatcgtct gtgaaaaagt gtgcttctt aaaggggctt ctggggctga aatggcatca aatggtaaat aacatatgcc agttatttt ctggactgtt ttatccctaa tgcttgtgtt ttatgtggtt attgcaaaa aagtatatga ttcttataga aagtcctcaaaa gtaaggacag aaaaaaacac aaaaagctgg aaggcaaatg attgtgtgtc gtggctgtct tctttgtgtg ttttgctcca ttctattttg ccagagtctc atatactcac agtcaaacca acaataagac tgactgtaga ctgcaaaatc aactgtttat tgctaaagaa acaactctct ttttggcagc aactaacatt tgtatggatc ccttaatatata catattctta tgtataaaat tcacagaaaa gctaccatgt atgcaaggga gaaagaccac agcatcaagc caagaaaatc atagcagtca gacagacaac ataaccttag gctgacaact gtacataggg ttaacttcta	RRALSVOQR CCRRAWILV LHQPQVAAIF MPITLLDNII TAFVIIMIIV YTTVLFANIY VALLFILSWL PLWTLMLSD QLQLCQKRAK EELKETNSS EI	Homo sapiens

514	160324	G. Protein- Coupled Receptor GPR86/GPR94/ P2Y13	NP_076403.1	<p>tttattgatg agacttccgt agataatgtg gaatacaaat ttaaccaaga aaaaaagatt  ggaacaaatg ctctcttaca ttttattatc ctgggtgaca gaaaagatta tataaaattt  aaatccacat agatctattc ataagctgaa tgaaccatta ctaagagaaat gcaacaggat  acaaatggcc actagaggtc attatttctt tctttctttt tttttttt aattcaaga  gcatttcaat ttaacatttt ggaagaagact aaggagaaac gtatatccct aaaaacctcc  ctccaaaaca cttctcaca tttttttcca caattcacat aacactactg cttttgtgcc  ccttaaatgt agatatgtgc tgaagaaaaa aaaaaagccc caactcttga agtccattgc  tgaaaactgc agccagggtg tgaagggat gcagacttga agagtctgag gaactgaagt  gggtcagcaa gacctctgaa atcctgggta aaggattttc tccttacaat tacaaacagc  ctctttcaca ttacaataat ataccatagg aggcacaagc accattatta agccactttg  cttacacctt aagtgtgtac aattcaagtg tgagaatgct gtgttaacta ttctttggaa  ttctccttct gtccagcaaa tactctaag atggttaaac atggcaccta ctcagcaatg  ccttcctgga ccacaacccc tatccccctg cccacacctc ctcatataaa acaaatactt  ctactgtttg ggtgtgtgat aggttctca atgcagatct ccttttcta gttagctata  ttcttgactg catcgcgtaa aaatgttaa gcttcttgag agacagacat gccagatttt  cttggtatct ccataatac gacctacagt gctgacctc cagatgtttt aaatagaatt  gctattctcg atacatacaa agacgtaatt gctgacccac aatcagtaac atccattatg  ggagattttt caaaggatgg tgacctgct tgtatttatt taccttggtg ttttttcttg  catccttctg tgattcaaaa aagtaaaatg tggctttctg aaatgatgga taagagtcta  catcttctag aaaaaataca taaaggagta gttaaagctc gtaaatgtgc cagcagctcc  aacacgacca tcgtagggtg aagccacgt tttcttccat ggcctcaaa ggcctagaac  ttgctacact ttctggcctt acctctagc tactatacca tctcttgaac ttataactct  tgtataaatt tctaacttcc agaaaatgcc atactctgt ttggcaccac acatgtatat  ttccccctgg tacacttggg agactcttat ccactctgga aacctatgt tgtcatcact  tggtcacatg aatattacct ggccaatata ccaccatcac ctcaaaaccca atcacccct  cctctgtatg ctgtcacacc tatattatta aacttatcac attgcatgtg aattacttcc  tgacctttgt atctactctt ttagtaactg atgtatatat ctgaaaggag agattgtttc  attgtgcaat caataaatgt ttgataaaat aaagccc</p>	IPSSSTFIY P	Homo sapiens
515	160329	Proteinase- Activated Receptor 4	NM_003950	<p>LKNTLVADLI MTLMLPFKIL SDSHLAPWQL RAFVCRFSSV IFYETMYVGI VLLGLIAFDR  FLKIIIRPLRN IFLKKPVFAK TVSIFIWFFL FFISLPNMIL SNKEATPSSV KKCASLKGPL  GLKWHQMVNN ICQFIFWTVF ILMVFYVVI AKKVDSYRK SKSKDRKNK KLEGRVFFVV  AVFFVCFAPF HFARVPYTHS QTNNKTDCLRL QNQLFIKET TLFLAATNIC MDPLIYIFLC  KKFTEKLPCM QGRKTTASSQ ENHSSQTDNI TLG</p>	gagccttcc A	Homo sapiens



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516 160329 Proteinase- NP\_003941.1 tggggctggg gctgcattcc ctggagactc actgcaagtt cctgcccagg aggtgaggg  
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Homo sapiens

517	160330 G Protein- Coupled- Receptor TM7XN1/GPR56	NM_005682	cggcagcagg gtctcgctct gtccacacagg ctggagtgca gtgggtgtgat cttgggtcat A cgtaacctcc acctccggg ttcaagtgtat tctcatgctt cagcctccc agtagctggg attacaggtg gtgacttcca agagtgtact cgtcggagga aaatgactcc ccagtcgctg ctgcagacga cactgttctt gctgagtcgt ctcttctctg tccaagtgct ccacggcagg ggccacaggg aagactttcg cttctgcagc cagcgggaac agacacacag gacgagcctc cactacaaac ccacaccaga cctgcgcatc tccatcgaga actccgaaga ggcctcaca gtccatgccc ctttccctgc agcccacctt cttccctga cttccctgga ccccaggggc ctctaccact tctgacctta ctggaaccga catgctggga gattacatct tctctatggc aagcgtgact tcttgctgag tgacaaagcc tctagcctcc tctgcttcca gcaccaggag gagagcctgg ctacaggccc cccgtgtta gccacttctg tccactcctg gtggagcctt cagaacatca gcctgcccag tgcgcccagc ttcacttctt ccttccacag tctcccac acggccgctc acaatgctc ggtggacatg tgcgagctca aaaggacct ccagctgctc agccagtcc tgaagcatcc ccagaaggcc tcaaggaggc ctcgggctgc cccgcccagc cagcagttgc agagcctgga gtcgaaactg acctctgtga gattcatggg ggacatggtg tccttogagg aggaccggat caacgccacg gtatggaagc tccagcccac agccggcctc caggacctgc acatccactc ccggcaggag gaggagcaga ggcagatcat ggagtactcg gtgctgtgc ctggaacct tggaggactt cagcagcaa gccctgttcc aggacaagaa tccagccaa gtcctgggtg agaaggtctt ggggattgtg gtacagaaca ccaagtagc caacctcacg gagccctggg tgctcacttt ccagcaccag ctacagccga agaattgtac tctgcaatgt gtgttctggg ttgaagacct cacattgagc agcccggggc attggagcag tgcgtgggtg gagacctca ggagagaac ccaaacatcc tgcttctgca accacttgac ctactttgca gtgctgatgg tctctcgggt ggaggtggac gccgtgcaca agcaatacct gagectcctc tctacgtgg gctgtgtcgt ctctgccctg gccctgcttg tcaactatgc cgcctacctc tgctccaggg tgcccctgcc gtgcaggagg aaacctcggg actacacct caaggtgcac atgaacctgc tgctggcctt ctctcgtcgt gacacagct tctgtctcag cgagccggtg gccctgacag gctctgaggc tggctgccga gccagtcca tcttctcctg ctctcctc ctcacctgcc tttcctggat gggcctcgag gggtaaac tctaccgact cgtgggtggag gtctttggca cctatgtccc tggctacctc ctcaagctga gcgcatatgg ctggggcttc cccatctttc tggtagcgtt ggtggccctg gtggatgtgg acaactatgg ccccatcatc ttggctgtgc ataggactcc agaggcgctc atctacctt ccatgtgctg gatccgggac tccctgttca gctacatcac caacctgggc ctcttcagcc tgggttttct gttcaacatg gcatgctag ccacctggt ggtgcagatc ctgcggctgc gcccccacac ccaaaagtgg tcacatgtgc tgacactgct gggcctcagc ctggtccttg gccctgccctg ggccttgatc ttcttctctt ttgcttcttg caacttccag cttgtcgtcc tctacctttt cagcatcatc acctccttcc aaggcttctt catcttcatc tggtaactgtt ccatgcggtt gcaggccccg ggtggcccc cccctctgaa gagcaactca gactgcgcca ggcctccccat cagctcgggc agcacctcgt ccagccgcct ctaggcctcc agcccacctg cccatgtgat gaagcagaga tgcggcctcg tcgcacactg cctgtggccc ccgagccagg cccagcccc ggccagtcag ccgcagactt tggaaagccc aacgacctg gagagatggg ccgttgccat ggtggacgga ctcccggggc tggggctttt gaattggcct tggggactac tgggtctca ctcagctccc	Homo sapiens
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518	160330	G Protein- Coupled- Receptor TM7XN1/GPR56	NP_005673.1	<p>acgggactca gaagtgcgcc gccatgctgc ctagggtact gtccccacat ctgtcccaac</p> <p>ccagctggag gcctgtgtctc tccttacaac ccctgggccc agcctcattg ctgggggcca</p> <p>ggccttgga cttgagggtc tggcacatcc ttaatcctgt gcccctgcct gggacagaaa</p> <p>tgtggctcca gttgctctgt ctctctgtgt caccctgagg gcaactctgca tcctctgtca</p> <p>ttttaacctc agtggcacc cagggcgaat ggggcccagg gcagaccttc agggccagag</p> <p>ccctggcgga ggagaggccc ttgtccagga gcacagcagc agctgccta cctctgagcc</p> <p>cg</p>	Homo sapiens
519	160387	Glucagon- Like Peptide 2 Receptor	NM_004246	<p>TPDLRISIE N P</p> <p>THRSSLHYKP</p> <p>LLSDKASSLL</p> <p>NASVDMCELK</p> <p>DRINATVWKL</p> <p>VDFSSQALFQ</p> <p>EDPTLSSPGH</p> <p>CWVSALACIV</p> <p>SEAGCRASAI</p> <p>VTLVALVDVD</p> <p>TMVVQILRLR</p> <p>GFLIFIWYS</p> <p>SRI</p> <p>atgaagctgg gatcgagcag ggcaggcctt gggagaggaa gcgcgggact cctgcctggc A</p> <p>gtccacgagc tgcccatggg catcctctgc ccctggggga ccagtcctct ctctctccac</p> <p>aggaagtgtc ctctctgggc ccctgggagg ccctctccca ctctgtctct gctgggttcc</p> <p>atcaagcaag ttacaggatc cctccttgag gaaacgactc ggaagtgggc tcagtacaaa</p> <p>caggcatgtc tgagagactt actcaaggaa cctctctggca tattttgtaa cgggacattt</p> <p>gatcagtaag tgtgttgccc tcattcttct cctggaaaatg tctctgtacc ctgcccttca</p> <p>tacttacctt ggtggagtga agagagctca ggaaggcctt acagacactg cttggctcag</p> <p>gggacttggc agacgataga gaacgccacg gatatttggc aggatgactc cgaatgctcc</p> <p>gagaaccaca gcttcaagca aaactggac cgttatgctt tgctgtcaac cttgcagctg</p> <p>atgtacaccg tgggatactc ctctctctctt atctcctctt tctgtgctct caccctcctc</p> <p>ttgtttcttc gaaaactcca ctgcacgcgc aactacatcc acatgaactt gtttgcctct</p> <p>ttcatcctga gaacctggc tgtactgggtg aaggacgtcg tcttctacaa ctcttactcc</p> <p>aagaggcctg acaatgagaa tgggtggatg tcctacctgt cagagatgtc caccctcctc</p> <p>cgctcagtc aggttctctt gcattacttt gtgggtgcca attacttatg gctgctgggt</p> <p>gaaggcctct acctccacac gctgctggag cccacagtgc tctctgagag gcgctgtg</p> <p>ccagatacc tgcgttggtg ttgggccttc cctgtgctat ttgtgtacc ctgggggttc</p> <p>gcccgtgcac acctggagaa cacagggtgc tggacaacaa atgggaaataa gaaaatctgg</p> <p>tggtatcatc caggacctat gatgctctgt gtaacagtca atttctcat ctctctgaaa</p> <p>attctcaagc ttctcatttc taagctcaaa gctcatcaaa tgtgcttcag agattataa</p> <p>tacagattgg caaaatcaac actggctcctc attcctttat tgggcgttca tgagatcctc</p> <p>ttctctttca tcaatgatga tcaagtga ggaattgcaa aacttatcag acttttcatt</p> <p>cagttgacac tgagctcctt tcaatgggttc ctggtggcct tgcagtatgg ttttgccaat</p>	Homo sapiens

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522.	160388	Latrophilin- NP_055736.1	1	<p>           agggagctac cgggaaccca agcaccctt gggaggccgg gaggcctgtg gcatggacac            cctgcccctg aacggcaact tcaataacag ttactcctg cgaagtgggg atttccctcc            cgggatggg ggcctgagc cgcccaggg ccggaaccta gccgatggcg cggcctttga            gaagatgac atctcagagc tggcgacaa caacctgcg gggagcagca gcgcggccaa            gggccctcca ccgctgagc cccctgtgc accctgtcca gggggcgggg gcgaggaaaga            ggcggggcgg ccggggggtg ctgaccgggc cgagattgaa ctctctata aggccctgga            ggagcctctg ctgctgccc gggcccagtc ggtgctgtac cagagcgatc tggacgagtc            ggagagctgc acggccgagg acggcgccac cagcgagccc ctctctccc ctctggccg            ggactccctc tatgccagc gggccaaact cggggactca cctctctacc cggacagcag            ccctgagggg ccagtgagg cctgcccc cccccctccc gaccccccg gccccccga            aatctactac acctcgccc cgccagcct ggtggcccgg aatccctgc agggctacta            ccagtgccg cgtcctagcc acgagggcta cctggcagcc caggccttg agggccagg            gccgatgg gacgggcaga tgcagctggt caccagtctc tgagggcacc tcatggacca            gggctggtg gccaggcca gggagggaac cctggcagg gctctggtg gagaggaga            cagatggagg cagtggctgg tgggccaactc tctccaggtg cccctcagcc atggccccta            cagtccctc aggggactct aacctggggg cctgaggtgc cagggttcac agacagggtt            tcccaccagc cacacgcacc agctctattt gggggaagtg tagtgaggag gagccagag            gacccaggg gagtgaggag ggagaacttg gaagggtgca gccacttcc agactctccc            ctctccacc cttctacct gtgaaggaa atgagggtt tagttcctg ggcaggagg            ggcagcttct gagttgcca agggccccc actgattgaa cctgttagct gctcctctcc            gcagccagaa atgctgccc gtcgacccag agggagcagc gagcaggac agatggacac            gtctctctg cgctgtaatt cctgctccc tggagactgg gaaaaggccg cagggcaggg            ggactggcg gtggtggctg gtggtttaa ggtgaactt tcttgaagc tcttctccc            ttgctcttg tccctgccc gcaagcaaac ctgccccctc tgcctccag tgacccaat            gacccctcc cttggggcga ctctgatga agcacaactc ccgcagggc cccagccca            cagggtggc catatttggc cagttccccc tctgtgggc tggctatct ggggagcaga            ttttgggtct ggatctccct ggggagtggt tcttgggctt ggatcttcc ctaggggcc            ctcttactcc ttctctctc ctctctctc cctctcttc cccattgctg taaatattc aacgaaatgg            aaagaaaaa aaaaagac         </p>	Homo sapiens
				<p>           PGSDVIMVEN P            CEGYPIELRC            QCVVVAGSDA            GAWCKDPLQA            GAVFYNKERT            YATEGNNGRL            GNRVDYAFNT            PSAGATSPPP            VPSTRPPAP            GPDLPATAP            RYSLEFGPPD            VYVDDDEAA            AVDENGWLVI            RWGKTDIDL            VCGVLYVLR            LYVNNYFV            THPVGAINQL            RCPKGTGRI            TRGSIYAGDV            SSSVKLMEQL            EALESWKDMN            VETVDNLLRP            LEVTLNTEG            QVQELVFPQE            EYPRKNSIQL            SAKTIKQNSR         </p>	

523	160390	Cadherin EGF NM_001408 LAG Seven- Pass G-Type Receptor 2 (CELSR2)	<p>           NGVVKVFIL YNNLGLFLST ENATVKLAGE AGPGGPGGAS LVVNSQVIAA SINKESSRVF            LMDPVIPTVA HLEDKNHFNA NCSFWNYSER SMLGYWSTQG CRIVESNKTH TTCACSHLTN            FAVLMAHREI YQGRINELL L SVITWVGIV IACPIFAGLL HYFFLAASF LCLEGVHLYL LLVEVFESEY            INFLAELLF LVGIDKTQYE AAIDYRSYG LKAIALLFLL GLTWAFGLLF INKESVVMNV            SRTKYIYLG YCFPALVVG I RSLDNKSWA LGTAALFLLF LKESVVMNV            FLMTLHKMI RSSLVKPDS QKVKHKEYSK CLRHYSYCCIR SPFGGTHGSL KTSAMRSNTR            LFTTFNAFQG VFIFVHCAL TESSEFMAGDI NSTPTLNRET MGNHLLTNPV LQPRGGTSPY            YYTGTSRIR RMWNTVRKQ NPSSPPVENS PGSYREPKHP LGGREACGMD TPLNGNFNN SYSLSRGDFP            NTLIAESVGF NPSSPPVENS PGSYREPKHP LGGREACGMD TPLNGNFNN SYSLSRGDFP            PGDGPEPPR GRNLADAAAF EKMIISELVH NNLRGSSAA KGPPEPPPV PPVPGGGGEE            EAGGPGGADR AEIELLYKAL EEPILLPRAQ SVLYQSDLE SESCTAEDGA TSRPLSSPPG            RDSLYASGAN LRDSPSYPDS SPEGPSEALP PPPAPPGPP EIYYTSRPPA LVARNPLOQY            YQVRRPSHEG YLAAPGLEGP GPDGDGMQL VTSL            taggagccgg aggagagacc gccgcccggc ttgacccggc cgccggccgg gagctgggag A            agatgaggag ccgggccacc gccgtccccc tcccaacgcc gccgcccggc ctgctgctgc            tgtgtgtgct gctgctgccc ccgccactat tgggagacca agtggggccc tgcgttccct            tgggggccag gggacgaggc tcttcggggc cctgcgccc catgggctgg cctgtccat            cctcagcgtc gaactcttgg cttcacacca gccgtcgag ggatggggc actgagctga            ctggccacct gccacccac cagatggcc tggaggtttg gtgtccagaa tccgagggcc            atattccctt accacagct cctgaaggct gccctggag ctgtcgctc ctgggcatg            gagggccact ttcccacag ggcaagctca cactgcccga ggagcacccg tgcttaagg            ctccacggct cagatgccc gccgtgagc tggcacaggc cccggggctc agggcagggg            aaaggtcacc agaagagtc ctgggtgggc gtgggaaaag gaatgtaaat acagccccc            agttccagcc cccagctac caggccacag tgcggagaa ccagccagca ggcacccctg            ttgcatccct gaggccatc gaccggagc aggtgagc aggtcgactg gactacacca            tggatgccc ctttgatag cgtcccaac agttcttct cctggaccca gtccactggtg            cagtaaccac agccgaggag ctggatcgtg agaccaagag caccacgctc ttcagggtca            cggcgaggga ccacggcatg ccccgacga gtgccctggc tactactacc atcttggtta            ctgacaccaa tgaccatgac cctgtgttcg agcagcagga gtacaaggag agcctcaggg            agaacctgga ggttggtctat gagggtctca ctgtcaggc cagggatggt gatgccccct            ccaatgccc aaattctgtac cgtctgctgg aggggtctgg gggcagcccc tctgaagtct            ttgagatcga cctcgtctt cgggtgatcc gaacccgtgg cctgtggat cgggaagagg            tggaaatccta ccagctgagc gttagagcaa gtgaccaggc tcgggacccc ggtcctcggg            gtaccacagc cgtgttttc cttctgtgg aggatgacaa tgataatgcc cccagttta            gtgagaagcg ctatgtggtc caggtgagg aggatgtgac tccaggggccc ccagtactcc            gactcacagc ctggatcga gacaaaggga gcaatgccc ggtgcactat agcatcatga            gtggcaatgc tcggggacag ttttatcttg atgccagac tggagctctg gatgtggtga            gccctcttga ctatgagc accaaggag acaccctac ggtgcagca caggatggtg            gccgtccccc actctctaat gtctctggt tggtagacgt acaggtcctg gatataacg            acaatgcccc catctctgct agcacccctt tccaggctac tgcctggag agcgtccct            taggctacct ggttctccat gtccaggcta tgcaggctga tgcgtgtgac aatgccccg         </p>	Homo sapiens
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Homo  
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aagtgcccta ttctttttt



SEQ ID NO:	LSID	Gene	Source ID	LPID	Peptide	SpeciesName
692	127	5-HT1A Receptor	P08908	595	CAPASFERKNERNAEAKRKM	Homo sapiens
693	127	5-HT1A Receptor	P08908	608	GRIFRAARFRIRKTVKKVE	Homo sapiens
694	127	5-HT1A Receptor	P08908	610	RTPEDRSDPDACTISK	Homo sapiens
695	127	5-HT1A Receptor	P08908	612	RHGASAPAPQPKKSNGE	Homo sapiens
696	128	5-HT1B Receptor	P28222	585	KQTPNRTGKRLTRAQLTID	Homo sapiens
697	128	5-HT1B Receptor	P28222	586	SPGSTSSVTSINSRVDP	Homo sapiens
698	128	5-HT1B Receptor	P28222	598	KVRVSDALLEKKLMA	Homo sapiens
699	128	5-HT1B Receptor	P28222	599	ANLSSAPSQNCsAKD	Homo sapiens
700	129	5-HT1D Receptor	P28221	577	IKLADSALERKRISAA	Homo sapiens
701	129	5-HT1D Receptor	P28221	588	QEASNPSLNATETSEA	Homo sapiens
702	129	5-HT1D Receptor	P28221	589	RIYRAARNRILNPPSL	Homo sapiens
703	129	5-HT1D Receptor	P28221	590	KAGEEMSDCLVNTSQIS	Homo sapiens
704	130	5-HT1E Receptor	P28566	815	RHLSNIRSTDSQNSFASC	Homo sapiens
705	130	5-HT1E Receptor	P28566	817	CITEASMAIRPKTITEKM	Homo sapiens
706	130	5-HT1E Receptor	P28566	818	DNDLDHPGERQGISST	Homo sapiens
707	130	5-HT1E Receptor	P28566	2738	CVSDFSTSDPTTEFEK	Homo sapiens
708	130	5-HT1E Receptor	P28566	2739	RIYHAAKSLYQKRGSSR	Homo sapiens
709	131	5-HT1F Receptor	P30939	604	ESGEKTSKSVTSVVL	Homo sapiens
710	131	5-HT1F Receptor	P30939	606	DKCKISEEMSNFLAWLG	Homo sapiens
711	131	5-HT1F Receptor	P30939	864	IAKEEVNGQVLESSE	Homo sapiens
712	131	5-HT1F Receptor	P30939	869	STVRSLSRSEFKHEKSWR	Homo sapiens
713	132	5-HT2A Receptor	CAA01675.1	1106	DAFNWTVDSNRTNLSC	Homo sapiens
714	132	5-HT2A Receptor	CAA01675.1	1107	FGLQDDSKVFKEGSC	Homo sapiens
715	132	5-HT2A Receptor	CAA01675.1	1108	PGSYTGRRTMQSISNEQKAC	Homo sapiens
716	132	5-HT2A Receptor	CAA01675.1	1109	CSMVALGQHSSEASKDNSD	Homo sapiens
717	132	5-HT2A Receptor	CAA01675.1	1110	NTIPALAYKSSQLQMGQ	Homo sapiens
718	133	5-HT2B Receptor	P41595	1111	KGIEDVDNPNNTIC	Homo sapiens
719	133	5-HT2B Receptor	P41595	1112	CSSPEKVAMLDGSRKDKA	Homo sapiens
720	133	5-HT2B Receptor	P41595	1113	RRITIGKKSVQTSISNE	Homo sapiens
721	133	5-HT2B Receptor	P41595	1114	CNVYRATKSVKTLRKPSK	Homo sapiens
722	133	5-HT2B Receptor	P41595	1187	SGLQTESIPEEMKQIVEEQG	Homo sapiens
723	134	5-HT2C Receptor	P28335	1115	CKRNTAEFEENSANPNQDQNA	Homo sapiens
724	134	5-HT2C Receptor	P28335	1116	GHTTEPPGSLDLFLKC	Homo sapiens
725	134	5-HT2C Receptor	P28335	1117	CNVKVEKKPPVVRQIPRV	Homo sapiens
726	134	5-HT2C Receptor	P28335	1118	IGLRDEEKVFNNTIC	Homo sapiens

727	134	5-HT2C Receptor	P28335	1119	RHTNEPVIEKASDNEP	Homo sapiens
728	134	5-HT2C Receptor	NP_000859.1	1826	RNAVHSFLVHLIGLLVWQCD	Homo sapiens
729	134	5-HT2C Receptor	NP_000859.1	1829	CDISVSPVAIVTDIFNTSD	Homo sapiens
730	134	5-HT2C Receptor	NP_000859.1	1830	DGGRFKFPDGVQNWPAALS	Homo sapiens
731	136	5-HT4 Receptor	CAA73107.1	654	NNIGIIDIEKRKFNQ	Homo sapiens
732	136	5-HT4 Receptor	CAA73107.1	655	ESRPQASADQHSTHRMR	Homo sapiens
733	136	5-HT4 Receptor	CAA73107.1	656	CDDERYRPSILGQTVP	Homo sapiens
734	136	5-HT4 Receptor	CAA73107.1	657	RDAVECGGQWESQCHPPATS	Homo sapiens
735	136	5-HT4 Receptor	CAA73107.1	2682	VTAKEHAHQIQLQRAGASSESRP	Homo sapiens
736	136	5-HT4 Receptor	CAA73107.1	2683	KSFRRAFLILCCDDE	Homo sapiens
737	136	5-HT4 Receptor	CAA73107.1	2684	VTAKEHAHQIQLQRAGA	Homo sapiens
738	136	5-HT4 Receptor	CAA73107.1	2685	KEHAHQIQLQRAGA	Homo sapiens
739	136	5-HT4 Receptor	CAA73107.1	2686	VTAKEHAHQIQLQR	Homo sapiens
740	138	5-HT6 Receptor	P50406	649	RTPRPGVESADSRRLATK	Homo sapiens
741	138	5-HT6 Receptor	P50406	650	CPRERQASLASPSLRIS	Homo sapiens
742	138	5-HT6 Receptor	P50406	652	PLFMIRDFKRALGRFLPC	Homo sapiens
743	138	5-HT6 Receptor	P50406	653	RAAAAVNFFNIDPAEPE	Homo sapiens
744	139	5-HT7 Receptor	P34969	658	EVTASAPTWDAPPDNASGC	Homo sapiens
745	139	5-HT7 Receptor	P34969	659	KAARKSAAKHKFPGFPRVE	Homo sapiens
746	139	5-HT7 Receptor	P34969	660	CANLSRLKHHERKNISIFKR	Homo sapiens
747	139	5-HT7 Receptor	P34969	663	KLAERPERPEFVLRAAC	Homo sapiens
748	272	Adenosine A1 Receptor	AAA17544.1	8	CHKPSILTYIAFLT	Homo sapiens
749	272	Adenosine A1 Receptor	AAA17544.1	9	NGSMGEPVIKCEFEKVISME	Homo sapiens
750	272	Adenosine A1 Receptor	AAA17544.1	10	NKVSASSGDPQKYVGKELK	Homo sapiens
751	272	Adenosine A1 Receptor	AAA17544.1	11	NDHFRCQPAPPIDEDLPEER	Homo sapiens
752	272	Adenosine A1 Receptor	P25099	286	CGKPPIDEDLPEEKAE	Rattus norvegicus
753	272	Adenosine A1 Receptor	P25099	302	GPKPPIDEDLPEEKAE	Rattus norvegicus
754	272	Adenosine A1 Receptor	AAA17544.1	303	MPPSISAFQAAYIGIEVL	Homo sapiens
755	273	Adenosine A2a Receptor	P29274	1237	QGNTGLPDVELLSHELKGV	Homo sapiens
756	273	Adenosine A2a Receptor	P29274	1238	MPIMGSSVMITVELAIA	Homo sapiens
757	273	Adenosine A2a Receptor	P29274	1239	RSHVLRQQEPEFKAAGT	Homo sapiens
758	273	Adenosine A2a Receptor	P11617	1240	RIREFRQTRKIIRSH	Canis familiaris
759	274	Adenosine A2b Receptor	P29275	676	KDSATNNTCEPWDTGNES	Homo sapiens
760	274	Adenosine A2b Receptor	P29275	677	CRQLQRTELMDHSRTLQRE	Homo sapiens
761	274	Adenosine A2b Receptor	P29275	678	RNRDFRYTFHKIIRYLLC	Homo sapiens
762	274	Adenosine A2b Receptor	P29275	679	CQADVKSNGGQAGVQ	Homo sapiens

763	274	Adenosine A2b Receptor	P29275	680	CVTLFQPAQGKPKW	Homo sapiens
764	274	Adenosine A2b Receptor	P29275	2714	MILLETQDALYVALELVIAAL	Homo sapiens
765	275	Adenosine A3 Receptor	P33765	683	IFYIIRNKLSNLNSKE	Homo sapiens
766	275	Adenosine A3 Receptor	P33765	686	NMKLTSYHRNVFLSC	Homo sapiens
767	275	Adenosine A3 Receptor	P33765	687	AYKIKFKETYLLIKAC	Homo sapiens
768	275	Adenosine A3 Receptor	P33765	689	TGAFYGREFKTAKSLF	Homo sapiens
769	275	Adenosine A3 Receptor	P33765	2296	KRVTHRRIWLAGLC	Homo sapiens
770	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	4	CPRVVLPEEIFFTIS	Homo sapiens
771	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	5	MGYLKPRGSFETTADDIDS	Homo sapiens
772	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	6	RYHSIVTMRRTVVLT	Homo sapiens
773	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	7	AFRSPELRDAFKKMIFC	Homo sapiens
774	376	Alpha 1a-adrenoceptor	AAA35496.1	12	RSTIRLEAGVKRERKASE	Homo sapiens
775	376	Alpha 1a-adrenoceptor	AAA35496.1	13	KEVPDPDERFCGITEEAG	Homo sapiens
776	376	Alpha 1a-adrenoceptor	AAA35496.1	14	RSTEMVQRLRMEAVQ	Homo sapiens
777	376	Alpha 1a-adrenoceptor	AAA35496.1	15	PRPSCAPKSPACRTRSP	Homo sapiens
778	377	Alpha 1b-adrenoceptor	P35368	696	KEMNSKELTRIHSK	Homo sapiens
779	377	Alpha 1b-adrenoceptor	P35368	697	GGSLERSQSRKDSLDGSGC	Homo sapiens
780	377	Alpha 1b-adrenoceptor	P35368	698	APEPPGRRGRHDSGPI	Homo sapiens
781	377	Alpha 1b-adrenoceptor	P35368	699	KLLTEPESPGTDGGASNGGC	Homo sapiens
782	379	Alpha 1c-adrenoceptor	AAA93114.1	1245	GSGMASAKTHFSVR	Homo sapiens
783	379	Alpha 1c-adrenoceptor	AAA93114.1	1246	RIPVGSRETFYRISKTDGVC	Homo sapiens
784	379	Alpha 1c-adrenoceptor	AAA93114.1	1247	SSMPRGSARITVSKDQSSC	Homo sapiens
785	379	Alpha 1c-adrenoceptor	AAA93114.1	1248	ESRGLKSGLTKDSDS	Homo sapiens
786	387	Alpha 2a-adrenoceptor	P08913	1343	ERRPNGLGPERSAGPG	Homo sapiens
787	387	Alpha 2a-adrenoceptor	P08913	1344	PGEAPAPAGPRDIDALD	Homo sapiens
788	387	Alpha 2a-adrenoceptor	P08913	1345	RGPRGKGKARASQVKPGD	Homo sapiens
789	387	Alpha 2a-adrenoceptor	P08913	1346	RPGATGIGTPAAGPGEE	Homo sapiens
790	387	Alpha 2a-adrenoceptor	P08913	1347	RVGAAKASRWGRQNRE	Homo sapiens
791	388	Alpha 2b-adrenoceptor	P18089	1348	IVKGDQGPQPRGRPQC	Homo sapiens

792	388	Alpha 2b-adrenoceptor	P18089	1349	RSNRRGPRAKGGPGQGE	Homo sapiens
793	388	Alpha 2b-adrenoceptor	P18089	1350	ASAREVNGHSKSTGEK	Homo sapiens
794	388	Alpha 2b-adrenoceptor	P18089	1351	RGVGAIGGQWRRRAH	Homo sapiens
795	389	Alpha 2c-adrenoceptor	P18825	1352	RAPVGPDGASPTIENG	Homo sapiens
796	389	Alpha 2c-adrenoceptor	P18825	1353	RTGTARPRPPTWSRTR	Homo sapiens
797	389	Alpha 2c-adrenoceptor	P18825	1354	ASRSPGPGGRLSRASS	Homo sapiens
798	389	Alpha 2c-adrenoceptor	P18825	1355	RSVEFFLSRRRRARSSVC	Homo sapiens
799	599	Bradykinin B1 Receptor	P46663	798	PMASGRQQRRRQARVC	Homo sapiens
800	599	Bradykinin B1 Receptor	P46663	799	NYHILASLRTREEVSR	Homo sapiens
801	599	Bradykinin B1 Receptor	P46663	800	RVRGPKDSKTTALILT	Homo sapiens
802	599	Bradykinin B1 Receptor	P46663	801	VGRLFRTKVWELYKQC	Homo sapiens
803	600	Bradykinin B2 Receptor	AAB02793.1	794	FRTMKEYSDEGHNVAC	Homo sapiens
804	600	Bradykinin B2 Receptor	AAB02793.1	795	CTMQIMQVLRNNEMQKFKE	Homo sapiens
805	600	Bradykinin B2 Receptor	AAB02793.1	796	CQDERIDVTQIASFM	Homo sapiens
806	600	Bradykinin B2 Receptor	AAB02793.1	797	CRSEPIQMENSMTLRTS	Homo sapiens
807	635	Beta-1 adrenoceptor	AAA51667.1	1357	RVFREAQKQVKKIDSC	Homo sapiens
808	635	Beta-1 adrenoceptor	AAA51667.1	1358	CERRFLGGPARPPSPS	Homo sapiens
809	635	Beta-1 adrenoceptor	AAA51667.1	1359	ANGRAGKRRPSRLVALRE	Homo sapiens
810	635	Beta-1 adrenoceptor	AAA51667.1	1360	CARRAARRRHATHGDRPRAS	Homo sapiens
811	635	Beta-1 adrenoceptor	AAA51667.1	1361	CLARPGPPSPGAAASD	Homo sapiens
812	635	Beta-1 adrenoceptor	AAA51667.1	1362	CNGGAAADSDSLDEP	Homo sapiens
813	640	Beta-2 adrenoceptor	NP_000015.1	2654	KRQLQKIDKSEGRFHV	Homo sapiens
814	640	Beta-2 adrenoceptor	NP_000015.1	2656	GEQSGYHVEQEKENKLLC	Homo sapiens
815	640	Beta-2 adrenoceptor	NP_000015.1	2662	APNRSHAPDHDVTQQR	Homo sapiens
816	640	Beta-2 adrenoceptor	NP_000015.1	2663	VPLVIMVFVYSRVFQE	Homo sapiens
817	643	Beta-3 adrenoceptor	P13945	1390	RGELGRFPPEESPAP	Homo sapiens
818	643	Beta-3 adrenoceptor	P13945	1391	SRLAPAPVGTCAPE	Homo sapiens
819	643	Beta-3 adrenoceptor	P13945	1392	GVPACGRRPARLLPRE	Homo sapiens
820	643	Beta-3 adrenoceptor	P13945	1393	PSGVPAARSSPAQPRLC	Homo sapiens
821	688	Opsin, blue-sensitive	NP_001699.1	1753	EEEFYFKNISSVGPWDGPQ	Homo sapiens
822	688	Opsin, blue-sensitive	NP_001699.1	1754	CGPDWYTVGTYRSESYT	Homo sapiens
823	688	Opsin, blue-sensitive	NP_001699.1	1755	NNRNHGLDLRLVTIPS	Homo sapiens
824	688	Opsin, blue-sensitive	NP_001699.1	1756	IMKMVCGKAMTDESDT	Homo sapiens
825	692	Bombesin Receptor	AAA35604.1	20	SITNDESSSSVVSNDNTNK	Homo sapiens
		Subtype-3				
826	692	Bombesin Receptor	AAA35604.1	21	KAVVKPLERQPSNAILKTC	Homo sapiens
		Subtype-3				

827	692	Bombesin Receptor Subtype-3	AAA35604.1	22	RDPNKNMTFESCTSPVSKK	Homo sapiens
828	692	Bombesin Receptor Subtype-3	AAA35604.1	23	RTLYKSTLINIPTEEQSHARK	Homo sapiens
829	692	Bombesin Receptor Subtype-3	AAA35604.1	24	KSFQKHFKAKQLFCKKAERPE	Homo sapiens
830	692	Bombesin Receptor Subtype-3	NP_001718.1	2286	NKGWSGDNSPGIEALC	Homo sapiens
831	692	Bombesin Receptor Subtype-3	NP_001718.1	2287	QRQPHSPNQTLISITNDTE	Homo sapiens
832	692	Bombesin Receptor Subtype-3	NP_001718.1	2288	RPEPPVADTSLTLAV	Homo sapiens
833	692	Bombesin Receptor Subtype-3	NP_001718.1	2289	SEISVTSFTGCSVKQAEDR	Homo sapiens
834	729	CXC Chemokine Receptor 5	P32302	1382	ELDRLDNYNDTSLVENHLC	Homo sapiens
835	729	CXC Chemokine Receptor 5	P32302	1383	SGGHNNNSLPRCTFSQE	Homo sapiens
836	729	CXC Chemokine Receptor 5	P32302	1384	CWGVVHRLRQAQRPP	Homo sapiens
837	729	CXC Chemokine Receptor 5	P32302	1385	CQLFPSWRRSSLSENA	Homo sapiens
838	735	C-C Chemokine Receptor 1	P32246	305	TEDYDTITTEFDYGDATPC	Homo sapiens
839	735	C-C Chemokine Receptor 1	P32246	1242	ASMPGLYFSKTQWETHHTC	Homo sapiens
840	735	C-C Chemokine Receptor 1	P32246	1243	CSLHFPHESLREWKLFQA	Homo sapiens
841	735	C-C Chemokine Receptor 1	P32246	1244	TLISVFQDFLFTHC	Homo sapiens
842	737	C-C Chemokine Receptor 3	P51677	1386	CSALYPEDTVYSWRHF	Homo sapiens
843	737	C-C Chemokine Receptor 3	P51677	1387	PEFIFYETEELFEETLC	Homo sapiens
844	737	C-C Chemokine Receptor 3	P51677	1388	SSYQSILFGNDCERSK	Homo sapiens
845	737	C-C Chemokine Receptor 3	P51677	1389	GRVIPFLPSEKLERTS	Homo sapiens
846	737	C-C Chemokine Receptor 3	P51677	1751	DDVGLLCEKADTRALMAQFV	Homo sapiens
847	738	C-C Chemokine Receptor 4	P51680	306	MNATEVTDITQDETVMNSY	Mus musculus
848	738	C-C Chemokine Receptor 4	P51679	348	DESIYSNYLYESIPKPC	Homo sapiens
849	738	C-C Chemokine Receptor 4	P51679	351	DTPSSYTQSTMDHDLHD	Homo sapiens
850	738	C-C Chemokine Receptor 4	P51679	353	LETLVEVLQDCTFE	Homo sapiens
851	738	C-C Chemokine Receptor 4	P51679	491	RNHTYCKTKYSLNSTWK	Homo sapiens
852	741	C-C Chemokine Receptor 7	P32248	748	CQDEVTDYIGDNTVD	Homo sapiens
853	741	C-C Chemokine Receptor 7	P32248	846	PELLYSDLQRSSEQA MRC	Homo sapiens
854	741	C-C Chemokine Receptor 7	P32248	847	QLRWSSSCRHIRSSMSVE	Homo sapiens
855	741	C-C Chemokine Receptor 7	P32248	848	GVKFRNDLFLKFLDLCG	Homo sapiens
856	742	C-C Chemokine Receptor 8	P51685	359	PDIFSSPCDAELUQTNG	Homo sapiens

857	742	C-C Chemokine Receptor 8	P51685	360	KILHLKRCQNHNTKAIR	Homo sapiens
858	742	C-C Chemokine Receptor 8	P51685	362	SQIFNYLGRQMPRESC	Homo sapiens
859	742	C-C Chemokine Receptor 8	P51685	493	FVGEKFKHLSEIFQKSC	Homo sapiens
860	752	CXC Chemokine Receptor 3	P49682	1371	ENFSSSYDYGENESDSC	Homo sapiens
861	752	CXC Chemokine Receptor 3	P49682	1372	CYAHILAVLLVSRGQRRRLRA	Homo sapiens
862	752	CXC Chemokine Receptor 3	P49682	1373	MVLEVSDHQVLNDAEVAALL	Homo sapiens
863	752	CXC Chemokine Receptor 3	P49682	1374	CPNQRGLQRQPSRRD	Homo sapiens
864	753	CXC Chemokine Receptor 4	P30991	1376	TEEMGSGDYDSMKKEPC	Homo sapiens
865	753	CXC Chemokine Receptor 4	P30991	1377	KKLRSMIDKYRLHLSVAD	Homo sapiens
866	753	CXC Chemokine Receptor 4	P30991	1380	CIISKLSHSGHQKRKALK	Homo sapiens
867	753	CXC Chemokine Receptor 4	P30991	1381	KILSKGKRGGHSSVSTE	Homo sapiens
868	755	Complement Component 3a Receptor 1	AAC50657.1	25	ENRSLNIVQPPGEMNDRLD	Homo sapiens
869	755	Complement Component 3a Receptor 1	AAC50657.1	26	KIPSGFPIEDHETSPLDNSD	Homo sapiens
870	755	Complement Component 3a Receptor 1	AAC50657.1	27	RKKARQSIQIGILEAAFSEE	Homo sapiens
871	755	Complement Component 3a Receptor 1	AAC50657.1	28	PQTFQRPADSILPRGSARLT	Homo sapiens
872	758	Complement Component 5a Receptor 1	P21730	811	DLNTPVDKTSNLTLRVPD	Homo sapiens
873	758	Complement Component 5a Receptor 1	P21730	812	CGVDYSHDKRRERAIVAIRL	Homo sapiens
874	758	Complement Component 5a Receptor 1	P21730	813	CYTFILLRTWSRRRAIRSTK	Homo sapiens
875	758	Complement Component 5a Receptor 1	P21730	814	QGRLRKSLPSLLRNVLTE	Homo sapiens
876	767	Calcitonin Receptor-like Receptor	Q16602	841	AELEESPEDSIQLGVTR	Homo sapiens
877	767	Calcitonin Receptor-like Receptor	Q16602	843	EFVLIPWRPEGKIAEEV	Homo sapiens
878	767	Calcitonin Receptor-like Receptor	Q16602	844	RRNWNQYKIQFGNSFSNSE	Homo sapiens
879	767	Calcitonin Receptor-like Receptor	Q16602	845	RSASYTVSTISDGGPGYSHDC	Homo sapiens
880	832	Cannabinoid Receptor 1	AAB18200.1	29	NDIQYEDIKGDMAKSLG	Homo sapiens
881	832	Cannabinoid Receptor 1	AAB18200.1	30	KENEENIQCCGENFMIDIE	Homo sapiens
882	832	Cannabinoid Receptor 1	AAB18200.1	31	EDGKVQVTRPDQARMDIR	Homo sapiens

883	832	Cannabinoid Receptor 1	AAB18200.1	32	CEGTAQLDLSMGDS	Homo sapiens
884	832	Cannabinoid Receptor 1	AAB18200.1	274	MKSILDGLADTFR	Homo sapiens
885	832	Cannabinoid Receptor 1	AAB18200.1	297	NKSLSFKEENIQC	Homo sapiens
886	833	Cannabinoid Receptor 2	CAA52376.1	33	KDGLDSNPMKDYMLSGPQK	Homo sapiens
887	833	Cannabinoid Receptor 2	CAA52376.1	34	QDRQVPGMARMRLDVRLAKT	Homo sapiens
888	833	Cannabinoid Receptor 2	CAA52376.1	35	KEEAPRSSVTETADGK	Homo sapiens
889	833	Cannabinoid Receptor 2	CAA52376.1	36	RSGEIRSSAHCLAHWKKC	Homo sapiens
890	922	Leukocyte Antigen CD97	NP_001775.1	2644	GRDPPAKDVMGPRQELLC	Homo sapiens
891	922	Leukocyte Antigen CD97	NP_001775.1	2646	CSPGYEPVSGAKTFKN	Homo sapiens
892	922	Leukocyte Antigen CD97	NP_001775.1	2647	FSSFSEIITPTETC	Homo sapiens
893	922	Leukocyte Antigen CD97	NP_001775.1	2648	CRPGWKPRHGIPNNQK	Homo sapiens
894	922	Leukocyte Antigen CD97	NP_001775.1	2649	DGEAGRDPPAKDVMGPR	Homo sapiens
895	922	Leukocyte Antigen CD97	NP_001775.1	2650	ANASLNLSKQKAELE	Homo sapiens
896	922	Leukocyte Antigen CD97	NP_001775.1	2651	RLSAVNSIFLSHNITKE	Homo sapiens
897	922	Leukocyte Antigen CD97	NP_001775.1	2652	KLTKQFSEINPDMKKL	Homo sapiens
898	922	Leukocyte Antigen CD97	NP_001775.1	2680	KLVDLMEAPGDVEAL	Homo sapiens
899	922	Leukocyte Antigen CD97	NP_001775.1	2681	RFFDKVQDLGRDSKTS	Homo sapiens
900	941	EMR1 Hormone Receptor	Q14246	1180	RAEYLDIESKVINKEC	Homo sapiens
901	941	EMR1 Hormone Receptor	Q14246	2675	CVMHSWEGHIRPTRKPNK	Homo sapiens
902	941	EMR1 Hormone Receptor	Q14246	2677	CLLNGQVREEYKRWITGKTP	Homo sapiens
903	941	EMR1 Hormone Receptor	Q14246	2678	CLLNGQVREEYKRWITGK	Homo sapiens
904	941	EMR1 Hormone Receptor	Q14246	2679	SGHLSCQGLKASCE	Homo sapiens
905	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1183	GTALANGTGELSEHQQ	Homo sapiens
906	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1184	ADSUEVFNLHERYYD	Homo sapiens
907	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1185	VRAHRHRLRPRRQKA	Homo sapiens
908	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1186	DKLRLYEQKTNLPALNRF	Homo sapiens
909	978	Cholecystokinin A Receptor	P32238	820	AKERKPSITSSGKYEDSDGC	Homo sapiens
910	978	Cholecystokinin A Receptor	P32238	821	CYLQKTRPPRKLELRQ	Homo sapiens
911	978	Cholecystokinin A Receptor	P32238	822	SANAWRAYDTASAERR	Homo sapiens
912	978	Cholecystokinin A Receptor	P32238	823	CPNPGPPGARGEVEEEE	Homo sapiens
913	1103	Corticotropin releasing factor Receptor 2	Q13324	453	CEPILDDKQIRKYDLHYRIAL	Homo sapiens
914	1103	Corticotropin releasing factor Receptor 2	Q13324	502	QLVDHEVHESNEVWC	Homo sapiens

915	factor Receptor 2	1103	Q13324	505	DPEGPYSYCNLTILDQIGTCW	Homo sapiens
916	Corticotropin releasing factor Receptor 2	1103	LR43	507	ALLEQYCHTIMITLNLG	Homo sapiens
917	factor Receptor 2	1240	CAA41734.1	41	SSHHEPRGSISKEC	Homo sapiens
918	Dopamine Receptor D1	1240	CAA41734.1	42	KAKPTSPSDGNATSLAETID	Homo sapiens
919	Dopamine Receptor D1	1240	CAA41734.1	43	CSGPESSEFKMSFKRE	Homo sapiens
920	Dopamine Receptor D1	1240	CAA41734.1	44	EDIKKEEAAGIARPLEK	Homo sapiens
921	Dopamine Receptor D5	1241	P21918	1407	PWEEDFWEPDVNAENC	Homo sapiens
922	Dopamine Receptor D5	1241	P21918	1408	CAPDTSLRASIKKETK	Homo sapiens
923	Dopamine Receptor D5	1241	P21918	1409	PNAVTPGNREVDNDEE	Homo sapiens
924	Dopamine Receptor D5	1241	P21918	1410	QTSPDGDPAESVWELDC	Homo sapiens
925	Dopamine Receptor D2	1242	P14416	1403	KRSSRAFRHLRAPLKGN	Homo sapiens
926	Dopamine Receptor D2	1242	P14416	1404	CTVIMKSNNGSFPVNR	Homo sapiens
927	Dopamine Receptor D2	1242	P14416	1405	KPEKNGHAKDHPKIAK	Homo sapiens
928	Dopamine Receptor D2	1242	P14416	1406	GKTRTSLKMSRRKLSQK	Homo sapiens
929	Dopamine Receptor D3	1243	P35462	1398	KQRRRKRLTRQNSQC	Homo sapiens
930	Dopamine Receptor D3	1243	P35462	1399	CNSVRPGFPQQLSPDP	Homo sapiens
931	Dopamine Receptor D3	1243	P35462	1400	CQDTALGGPGFQERGG	Homo sapiens
932	Dopamine Receptor D3	1243	P35462	1401	KREEKTRNSLSPTIAP	Homo sapiens
933	Dopamine Receptor D3	1243	P35462	1402	STSLKLGPLQPRGVPLRE	Homo sapiens
934	Dopamine Receptor D4	1244	P21917	1394	VAVAVPLRYNRQGGSR	Homo sapiens
935	Dopamine Receptor D4	1244	P21917	1395	EVARRAKLHGRAPRRP	Homo sapiens
936	Dopamine Receptor D4	1244	P21917	1396	PPSPTPPAPRLPQDPC	Homo sapiens
937	Dopamine Receptor D4	1244	P21917	1397	PPQTPPQTRRRRRRAKITGRE	Homo sapiens
938	Opioid Receptor, delta 1 (OPRD1)	1267	AAA18789.1	222	DAYPSAFPSAGANASGP	Homo sapiens
939	Opioid Receptor, delta 1 (OPRD1)	1267	AAA18789.1	224	LVDIDRRDPLVAAHLCL	Homo sapiens
940	Opioid Receptor, delta 1 (OPRD1)	1267	AAA18789.1	225	KRCFRQLCRKPCGRPD	Homo sapiens
941	Opioid Receptor, delta 1 (OPRD1)	1267	AAA18789.1	226	SRPREATARERTAC	Homo sapiens
942	Duffy Antigen	1424	AAC50055.1	1411	TENSSQLDFEDVMNSS	Homo sapiens
943	Duffy Antigen	1424	AAC50055.1	1412	NDSFPDGDYDANLEAAAPC	Homo sapiens
944	Duffy Antigen	1424	AAC50055.1	1413	CHASLGHRLGAGQVPG	Homo sapiens



945	1424	Duffy Antigen	AAC50055.1	1415	FGAKGLKKALGMGP	Homo sapiens
946	1451	EBV-Induced Gene 2	AAA35924.1	45	KQEAERTCMEYPNFEET	Homo sapiens
947	1451	EBV-Induced Gene 2	AAA35924.1	46	KLFRTAKQNPLTEKSGVNKK	Homo sapiens
948	1451	EBV-Induced Gene 2	AAA35924.1	47	KSAPEENSREMTETQM	Homo sapiens
949	1451	EBV-Induced Gene 2	AAA35924.1	48	CKGYKRKVMRMLKRQ	Homo sapiens
950	1486	Endothelin B Receptor	BAA14398.1	54	GEERGFPDRATPLLQTAE	Homo sapiens
951	1486	Endothelin B Receptor	BAA14398.1	55	RSLAPAEVPGDRTAGSP	Homo sapiens
952	1486	Endothelin B Receptor	BAA14398.1	56	PRTSPPPCQGPIEKE	Homo sapiens
953	1486	Endothelin B Receptor	BAA14398.1	57	EKQSLKQSLKFKAND	Homo sapiens
954	1488	Endothelin A Receptor	AAB25530.1	49	RYSNLSNHVDDFTFRGTE	Homo sapiens
955	1488	Endothelin A Receptor	AAB25530.1	50	NRRNGSLRIALSEHLK	Homo sapiens
956	1488	Endothelin A Receptor	AAB25530.1	51	EYRGEQHKTCMLNATSK	Homo sapiens
957	1488	Endothelin A Receptor	AAB25530.1	53	KNHDQNNHNIDRSSHKD	Homo sapiens
958	1598	Calcium-Sensing Receptor (CASR)	P41180	1425	RPGIEKFREEAEERDIC	Homo sapiens
959	1598	Calcium-Sensing Receptor (CASR)	P41180	1426	CHLGEGAKGPLPVDTLR	Homo sapiens
960	1598	Calcium-Sensing Receptor (CASR)	P41180	1427	GHEESGDRFSNSSTAFRLC	Homo sapiens
961	1598	Calcium-Sensing Receptor (CASR)	P41180	1428	KGIEGEPTCCFECVECPDG	Homo sapiens
962	1598	Calcium-Sensing Receptor (CASR)	P41180	1429	CSTAAHAFKVAARATLRRSN	Homo sapiens
963	1598	Calcium-Sensing Receptor (CASR)	P41180	1430	PQKNVMAHRNSTHQNSLE	Homo sapiens
964	1598	Calcium-Sensing Receptor (CASR)	P41180	1431	RPEVEDPEELSPALWSSSQ	Homo sapiens
965	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1878	ASWGGTPEERLKVAITMLTA	Homo sapiens
966	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1879	SEDSAPTNDTAANSAS	Homo sapiens
967	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1880	SYESAGYTVLRILPLWL	Homo sapiens
968	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1881	PVFLFTVTIPNGD	Homo sapiens
969	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2612	EERLKVAITMLTARGIIRFV	Homo sapiens
970	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2613	ERALSEDSAPTNDTAANSAS	Homo sapiens

971	1681	Like Receptor	Follicle Stimulating Hormone Receptor	AAA52477.1	58	QESKVTEIPSDLP RNAIELR	Homo sapiens
972	1681		Follicle Stimulating Hormone Receptor	AAA52477.1	59	DVLEIEADVFSNLPK	Homo sapiens
973	1681		Follicle Stimulating Hormone Receptor	AAA52477.1	60	RNGHCSSAPRVTSGSTY	Homo sapiens
974	1681		Follicle Stimulating Hormone Receptor	AAA52477.1	61	RGQRSSLAEDNESSYRGFD	Homo sapiens
975	1681		Follicle Stimulating Hormone Receptor	NP_000136.1	2231	CHHRICHCSNRVFLCQE	Homo saplens
976	1681		Follicle Stimulating Hormone Receptor	NP_000136.1	2232	LRVIQKGAFSGFGDLEK	Homo sapiens
977	1681		Follicle Stimulating Hormone Receptor	NP_000136.1	2233	LYVMSLLVLNVLAFFVIC	Homo sapiens
978	1681		Follicle Stimulating Hormone Receptor	NP_000136.1	2234	CNKSILRQEVDYMTQARGQR	Homo sapiens
979	1681		Follicle Stimulating Hormone Receptor	NP_000136.1	2236	SDNNNLEELPNDV FHGA	Homo sapiens
980	1681		Follicle Stimulating Hormone Receptor	NP_000136.1	2238	KLVALMEASLTYP SHC	Homo sapiens
981	1681		Follicle Stimulating Hormone Receptor	NP_000136.1	2241	SFESVILWL NKN GIGIEIHNC	Homo sapiens
982	1681		Follicle Stimulating Hormone Receptor	NP_000136.1	2248	IHSLQKVLLDIQDNINIHT	Homo sapiens
983	1681		Follicle Stimulating Hormone Receptor	NP_000136.1	2250	KANNLLYITPEAFQNL P	Homo sapiens
984	1681		Follicle Stimulating Hormone Receptor	NP_000136.1	2251	CYEMQAGIYRTTETSIVH	Homo sapiens
985	1726		G Protein-Coupled Receptor RDC1	AAA62370.1	1437	TNTPSSRKKMVR RVVC	Homo sapiens
986	1726		G Protein-Coupled Receptor RDC1	AAA62370.1	1439	ARAISSSDQEKHSSRK	Homo sapiens
987	1726		G Protein-Coupled Receptor RDC1	AAA62370.1	1440	KYSAKTGLTKLIDASRVSET	Homo saplens
988	1726		G Protein-Coupled Receptor RDC1	AAA62370.1	1893	PDTYILKTVTSASNNETVC	Homo sapiens
989	1762		Galanin Receptor GalR1	AAA50767.1	192	GNSLVITVLARSKPGKPR	Homo sapiens
990	1762		Galanin Receptor GalR1	AAA50767.1	193	PRASNQTFCWEQWDPDRHKK	Homo sapiens

991	1762	Galanin Receptor GalR1	AAA50767.1	194	KKLKNSKSKSEASKKTAQ	Homo sapiens
992	1762	Galanin Receptor GalR1	AAA50767.1	195	GNSLVTVLARSKP	Homo sapiens
993	1762	Galanin Receptor GalR1	AAA50767.1	196	RKDSHLSDTKENKSRID	Homo sapiens
994	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1250	QTAGELYQRWERYRREC	Homo sapiens
995	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1251	CENPEKNEAFLDQRLILR	Homo sapiens
996	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1253	CRLRSLGEEQRLPERAFR	Homo sapiens
997	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1276	PTSRGLSSGTLPGPGNEA	Homo sapiens
998	1813	Gastrin-Releasing Peptide Receptor	P30550	829	CNISHSADLPVNDWHPG	Homo sapiens
999	1813	Gastrin-Releasing Peptide Receptor	P30550	830	SDLHPFHEESTNQTFISC	Homo sapiens
1000	1813	Gastrin-Releasing Peptide Receptor	P30550	831	YNLPVEGNIHVKKQIES	Homo sapiens
1001	1813	Gastrin-Releasing Peptide Receptor	P30550	832	CQPGLIIRSHSTGRSTT	Homo sapiens
1002	1814	Cholecystokinin B Receptor	Q16144	1281	CEPRIRGAGTRELELAIR	Homo sapiens
1003	1814	Cholecystokinin B Receptor	Q16144	1282	RVRNQGGPLGAVHQNGRC	Homo sapiens
1004	1814	Cholecystokinin B Receptor	Q16144	1283	LRFDGSDSDSQSRVR	Homo sapiens
1005	1814	Cholecystokinin B Receptor	Q16144	1284	CRPETGAVGKDSGDCY	Homo sapiens
1006	1834	Glucagon Receptor	P47871	837	DGLLRTRYVSKIGDDL	Homo sapiens
1007	1834	Glucagon Receptor	P47871	838	CGPDGQWVRGPRGQPPWRDAS	Homo sapiens
1008	1834	Glucagon Receptor	P47871	839	CQMDGEEIEVQKEVAKMYSS	Homo sapiens
1009	1834	Glucagon Receptor	P47871	840	TSNHRASSSPGHGPPSKE	Homo sapiens
1010	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	206	KLQKWTQKKEKGKLSRMK	Homo sapiens
1011	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	207	DRSLAIRPLALKSNSKV/GQ	Homo sapiens
1012	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	208	RMIHLADSSGGQTKVFSQC	Homo sapiens
1013	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	209	DPHELQLNQSKNNIPARLK	Homo sapiens
1014	1945	Opsin, green-sensitive	NP_000504.1	1746	QRLAGRHPQDSYEDSTQSS	Homo sapiens
1015	1945	Opsin, green-sensitive	NP_000504.1	1747	CKPFGNVRFDAKLAIVG	Homo sapiens
1016	1945	Opsin, green-sensitive	NP_000504.1	1748	KTSCGPDVFGSSYPGVQS	Homo sapiens

1017	1945	Opsin, green-sensitive	NP_000504.1	1750	CILQLFGKKVDDGSELSS	Homo sapiens
1018	1945	Opsin, green-sensitive	NP_000504.1	1767	STRGPEFGPNYHIAPR	Homo sapiens
1019	1945	Opsin, green-sensitive	NP_000504.1	1768	TNGLVLAATMKFKKL	Homo sapiens
1020	1945	Opsin, green-sensitive	NP_000504.1	1769	ELSSASKTEVSSVSSVSP	Homo sapiens
1021	1951	Growth Hormone	Q92847	581	ADLDWDASPGNDSLGD	Homo sapiens
1022	1951	Secretagogue Receptor	Q92847	582	GVEHENGIDPWDTNEC	Homo sapiens
1023	1951	Secretagogue Receptor	Q92847	583	KLWRRRRGDVAVGASL	Homo sapiens
1024	1951	Secretagogue Receptor	Q92847	584	SQRKLSTLKDESSRAW	Homo sapiens
1025	1954	Secretagogue Receptor	Q02643	833	REDESACLQAAFEEMPNTILG	Homo sapiens
1026	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	834	CPDFFSHFSSESGAVKRD	Homo sapiens
1027	1954	Hormone Receptor	Q02643	835	VRKLEPAQGSLSHTQSQ	Homo sapiens
1028	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	836	RTEISRKWHGHDPELL	Homo sapiens
1029	2120	Histamine H1 Receptor	P35367	1167	GWNHFMQQTSVRREDKC	Homo sapiens
1030	2120	Histamine H1 Receptor	P35367	1168	CQHRELINRSLPSFSEIKL	Homo sapiens
1031	2120	Histamine H1 Receptor	P35367	1169	AGGGSVLKSPSQTPKE	Homo sapiens
1032	2120	Histamine H1 Receptor	P35367	1170	KSPVVFSEQEDDREVDKLYC	Homo sapiens
1033	2120	Histamine H1 Receptor	P35367	1171	TAPGKGKLRSGSNTGLD	Homo sapiens
1034	2120	Histamine H1 Receptor	P35367	1172	KRLRSHSRQVVSGLHMINRE	Homo sapiens
1035	2121	Histamine H2 Receptor	P25021	1173	NSRNETSKGNHTSKC	Homo sapiens
1036	2121	Histamine H2 Receptor	P25021	1174	CITYRIFKVARDAQAKR	Homo sapiens
1037	2121	Histamine H2 Receptor	P25021	1175	RDQAKRINHSSWKAA	Homo sapiens
1038	2121	Histamine H2 Receptor	P25021	1176	TAFVYRGLRGDDAINE	Homo sapiens
1039	2121	Histamine H2 Receptor	P25021	1177	HKTSLSNASQLSRTQSRE	Homo sapiens
1040	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	227	DSNGSAGSEDAQLEPA	Homo sapiens
1041	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	228	KVREDVDVIECSLQFPDDD	Homo sapiens
1042	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	229	RNTVQDPAVLRDIDGMNK	Homo sapiens
1043	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	230	CFPLKMRMERQSTSRVRN	Homo sapiens

1044	2964	(OPRK1) Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1432	CNTGIRKFPDVTKVFSSEN	Homo sapiens
1045	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1433	KMHNGAFRGATGPKTLD	Homo sapiens
1046	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1434	CESTVRKVSNIKLYSS	Homo sapiens
1047	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1435	FAVRNPELMATNKDTK	Homo sapiens
1048	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1436	CKRRAELYRRKDFSAVTSN	Homo sapiens
1049	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	210	ERHITVFRMQLHTRMSNR	Homo sapiens
1050	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	211	RQRTMRMSRHSRGPRNRD	Homo sapiens
1051	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	212	KHLATEWNTVSKLVM	Homo sapiens
1052	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	213	ENPTGPTESSDRSASSLN	Homo sapiens
1053	3038	G Protein-Coupled Receptor MRG	AAB21255.1	184	ESQISLSCSLCLHSGDQEAQ	Homo sapiens
1054	3038	G Protein-Coupled Receptor MRG	AAB21255.1	185	QQQKATRVYAVWQISAPM	Homo sapiens
1055	3038	G Protein-Coupled Receptor MRG	AAB21255.1	186	DKPEVGRNKKAAAGIDPME	Homo sapiens
1056	3038	G Protein-Coupled Receptor MRG	AAB21255.1	187	EQPHSTQHVENLLPREHRVD	Homo sapiens
1057	3057	Melanocortin 3 Receptor (MC3R)	P41968	451	RUHVKRIAALPPADGVAPQ	Homo sapiens
1058	3057	Melanocortin 3 Receptor (MC3R)	P41968	452	DPLUYAFRSLELRNTFRE	Homo sapiens
1059	3057	Melanocortin 3 Receptor (MC3R)	P41968	562	QAPFFSNQSSSAFCEQVFI	Homo sapiens
1060	3057	Melanocortin 3 Receptor (MC3R)	P41968	563	IVHSDYLTTFEDQFIQHMDNI	Homo sapiens

1061	3058	(MC3R)	Melanocortin 4 Receptor	AAB33341.1	1032	HSNASESLGKGYSDGGC	Homo sapiens
1062	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1033	KRIAVLPGTGAIRQGA	Homo sapiens
1063	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1035	NSTDIDAQSFTVNIDN	Homo sapiens
1064	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1469	NSTHRGMHTSLHLWNRSSYR	Homo sapiens
1065	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1022	ATEGNLSPNVKNKSSPC	Homo sapiens
1066	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1024	NKHLVIADAFVRHIDN	Homo sapiens
1067	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1025	MNSSFHLHFLDLNLNAT	Homo sapiens
1068	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1026	RYHHIMTARRSGAIIAG	Homo sapiens
1069	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1036	QGSQRILLGSLNSTPT	Homo sapiens
1070	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1038	EAGALVARAAVLQQLD	Homo sapiens
1071	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1039	ALRYHSIVTLPRARQA	Homo sapiens
1072	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1040	CQHAQGIARLHKRQRP	Homo sapiens
1073	3079		Melatonin Receptor type 1a	AAB17720.1	214	HSLKYDKLYSSKNSLC	Homo sapiens
1074	3079		Melatonin Receptor type 1a	AAB17720.1	215	CTARVFFVDSSNDVADR	Homo sapiens
1075	3079		Melatonin Receptor type 1a	AAB17720.1	216	QVRQRVKPDRKPKLKP	Homo sapiens
1076	3079		Melatonin Receptor type 1a	AAB17720.1	217	DSSNDVADRVKWKPSPLMTN	Homo sapiens
1077	3080		Melatonin Receptor type 1b	P49286	930	AVRPGWSGAGSARPSR	Homo sapiens
1078	3080		Melatonin Receptor type 1b	P49286	931	LVAIFYDGWALGEEHC	Homo sapiens
1079	3080		Melatonin Receptor type 1b	P49286	932	LVLQARRKAKPESRLC	Homo sapiens
1080	3080		Melatonin Receptor type 1b	P49286	933	CIQDASKGSHAEGLQSPA	Homo sapiens
1081	3080		Melatonin Receptor type 1b	P49286	934	QEMAPQIPEGLFVTSY	Homo sapiens
1082	3081		Melatonin-Related Receptor	Q13585	751	LAARDPAGQNPNDNLAE	Homo sapiens
1083	3081		Melatonin-Related Receptor	Q13585	752	ARARAHARDQAREQDRAHAC	Homo sapiens
1084	3081		Melatonin-Related Receptor	Q13585	753	DRASGHPKPHSRSSAY	Homo sapiens
1085	3081		Melatonin-Related Receptor	Q13585	754	HPKPAAADNPPELSASHC	Homo sapiens

1086	3081	Melatonin-Related Receptor	Q13585	755	DDSDLPESASSPAAGPT	Homo sapiens
1087	3093	Metabotropic Glutamate Receptor 1	Q13255	879	DDYKIQMINKSGVVRVC	Homo sapiens
1088	3093	Metabotropic Glutamate Receptor 1	Q13255	880	CRSNTFLNIFRRKKAG	Homo sapiens
1089	3093	Metabotropic Glutamate Receptor 1	Q13255	881	DTSTKTLYNVEEEDA	Homo sapiens
1090	3093	Metabotropic Glutamate Receptor 1	Q13255	882	ERFKLLQEWVYEHERE	Homo sapiens
1091	3094	Metabotropic Glutamate Receptor 2	Q14416	891	DFVRASLSRGADGSRHIC	Homo sapiens
1092	3094	Metabotropic Glutamate Receptor 2	Q14416	892	CVATSEKVGGRAMSRAAFEG	Homo sapiens
1093	3094	Metabotropic Glutamate Receptor 2	Q14416	893	CAAHSLRAVPFEQESK	Homo sapiens
1094	3094	Metabotropic Glutamate Receptor 2	Q14416	894	CDAMRPVNGRRLYKDF	Homo sapiens
1095	3094	Metabotropic Glutamate Receptor 2	Q14416	895	DAPFRPADTHNEVRFDK	Homo sapiens
1096	3094	Metabotropic Glutamate Receptor 2	Q14416	896	GKETAPERREVVTLC	Homo sapiens
1097	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	897	GGLFPIKEKGITGTEEC	Homo sapiens
1098	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	898	EFVRASLTKVDEAEVMC	Homo sapiens
1099	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	899	RSNIRKSYDSVIRELL	Homo sapiens
1100	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	900	CDKHLAIDSSNYEQES	Homo sapiens
1101	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	902	GTRRYTLAEKRETVILKC	Homo sapiens
1102	3096	Metabotropic Glutamate Receptor 4	Q14833	909	PSSLGPKPKGHPHMNSRID	Homo sapiens
1103	3096	Metabotropic Glutamate Receptor 4	Q14833	910	CGSGGGPIITKPERVVG	Homo sapiens
1104	3096	Metabotropic Glutamate Receptor 4	Q14833	911	CKLSRHALKKGSHVKK	Homo sapiens
1105	3096	Metabotropic Glutamate Receptor 4	Q14833	913	CPRMDPVDGTQLLKYI	Homo sapiens

1106	3096	Metabotropic Glutamate Receptor 4	Q14833	914	RIERMIHWPGSGGQQLPRSC	Homo sapiens
1107	3097	Metabotropic Glutamate Receptor 5	P41594	883	KDYFDYINVGSWDNGEL	Homo sapiens
1108	3097	Metabotropic Glutamate Receptor 5	P41594	884	KMDDDEVWSKSNIRSV	Homo sapiens
1109	3097	Metabotropic Glutamate Receptor 5	P41594	885	GETLRYKDRRLAQHKSEIC	Homo sapiens
1110	3097	Metabotropic Glutamate Receptor 5	P41594	886	NPNQTAVIKPFPKSTE	Homo sapiens
1111	3097	Metabotropic Glutamate Receptor 5	P41594	887	KALYDVAEAEHFAPA	Homo sapiens
1112	3097	Metabotropic Glutamate Receptor 5	P41594	888	RSPSPISLTSRAGSASRTD	Homo sapiens
1113	3097	Metabotropic Glutamate Receptor 5	P41594	889	RESPAAGPEAAAAKPD	Homo sapiens
1114	3098	Metabotropic Glutamate Receptor 6	O15303	903	QALIRGRGDGDEVGVRC	Homo sapiens
1115	3098	Metabotropic Glutamate Receptor 6	O15303	904	KLTSSTGTSDDSTRKC	Homo sapiens
1116	3098	Metabotropic Glutamate Receptor 6	O15303	905	DVEALQWSGDPHEVPSSLC	Homo sapiens
1117	3098	Metabotropic Glutamate Receptor 6	O15303	906	RFQVDEFTCEACPGDM	Homo sapiens
1118	3098	Metabotropic Glutamate Receptor 6	O15303	907	GARPPHSVIDYEEQRT	Homo sapiens
1119	3099	Metabotropic Glutamate Receptor 7	Q14831	917	CIAGSVRIPQERKDRITDFD	Homo sapiens
1120	3099	Metabotropic Glutamate Receptor 7	Q14831	918	NDEDIKQILAAAKRAD	Homo sapiens
1121	3099	Metabotropic Glutamate Receptor 7	Q14831	921	NIEDMQWKGKGVREIPASVC	Homo sapiens
1122	3099	Metabotropic Glutamate Receptor 7	Q14831	2693	IKQLLDTPNRAWI	Homo sapiens
1123	3099	Metabotropic Glutamate Receptor 7	Q14831	2694	DPPNIIDYDEHKTM	Homo sapiens
1124	3100	Metabotropic Glutamate Receptor 8	O00222	922	CANGDPPIFTKPKIS	Homo sapiens
1125	3100	Metabotropic Glutamate	O00222	923	CPRMSTIDGKELLYIRA	Homo sapiens



1126	3100	Receptor 8	O00222	924	KVEDMQWAHREHHPASVC	Homo sapiens
1127	3100	Metabotropic Glutamate Receptor 8	O00222	925	CESLEINTSSIKTIVISYS	Homo sapiens
1128	3100	Metabotropic Glutamate Receptor 8	O00222	1894	KFYWILTMQRTHSQEYAH	Homo sapiens
1129	3212	Opioid mu-type Receptor	AAA20580.1	231	DGNLSDPCGPNRTNLGGRDS	Homo sapiens
1130	3212	Opioid mu-type Receptor	AAA20580.1	232	DRTNHQLENLEAETAPLP	Homo sapiens
1131	3212	Opioid mu-type Receptor	AAA20580.1	233	IKALVTIPETTFQTVS	Homo sapiens
1132	3212	Opioid mu-type Receptor	AAA20580.1	234	RIRQNTIRDRHPSTANTVDR	Homo sapiens
1133	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1	1325	SERSQPGAEQSPETPPGRC	Homo sapiens
1134	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1	1326	CRAPRLQAYSWKEEE	Homo sapiens
1135	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1	1327	SSEGEPPGSEVVIMKP	Homo sapiens
1136	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1	1328	KQPPRSSPNTVKRPTKKGRD	Homo sapiens
1137	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1	1329	CRWDKRRWRKIPKRPQS	Homo sapiens
1138	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1	1330	EHNKIQNGKAPRDPVTENC	Homo sapiens
1139	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1	1331	DSTSVAVASNMIRDDE	Homo sapiens
1140	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1	1332	ENTVSTSLGSHSKDENSQKTC	Homo sapiens
1141	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1	1333	DEKQNVIVARKIVKMTK	Homo sapiens
1142	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1	1831	RIKKDKKEPVANQDPVPSL	Homo sapiens
1143	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1	218	SRSRVHKKRPEGPKEKKAKT	Homo sapiens
1144	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1	219	KKPRPGGRRPGGLRNGKLEEA	Homo sapiens
1145	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1	220	DKDTSNESSSGSATQNTKER	Homo sapiens
1146	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1	221	RPAANVARKFASARNQVRK	Homo sapiens

1147	3227	Muscarinic Acetylcholine Receptor M5	P08912	1334	KAEKRKPAHRAFRSC	Homo sapiens
1148	3227	Muscarinic Acetylcholine Receptor M5	P08912	1335	CSSYPSEDEDKPAID	Homo sapiens
1149	3227	Muscarinic Acetylcholine Receptor M5	P08912	1336	KESPGEEFSAEETEETFV	Homo sapiens
1150	3227	Muscarinic Acetylcholine Receptor M5	P08912	1337	KFRLVVKADGNQETNNGC	Homo sapiens
1151	3227	Muscarinic Acetylcholine Receptor M5	P08912	1338	KEPSTKGLNPNPSHQM	Homo sapiens
1152	3378	Tachykinin Receptor 3	NP_001050.1	1757	PAAETWIDGGGGVGAD	Homo sapiens
1153	3378	Tachykinin Receptor 3	NP_001050.1	1759	PSQPWANLTNQFVQPSWR	Homo sapiens
1154	3378	Tachykinin Receptor 3	NP_001050.1	1760	SRKKRATPRDPSFNGC	Homo sapiens
1155	3378	Tachykinin Receptor 3	NP_001050.1	2265	ADAVNLITASLAAGAA	Homo sapiens
1156	3378	Tachykinin Receptor 3	NP_001050.1	2290	SPSALGLPVASPAQSP	Homo sapiens
1157	3380	Neuromedin B Receptor	P28336	824	ERDFLPASDGGITTELVR	Homo sapiens
1158	3380	Neuromedin B Receptor	P28336	825	KTUKSAHNLPGEYNE	Homo sapiens
1159	3380	Neuromedin B Receptor	P28336	826	SEVARISLDNNSFTAC	Homo sapiens
1160	3380	Neuromedin B Receptor	P28336	828	CGRKSYQERGTSVLLSSA	Homo sapiens
1161	3404	Neuropeptide Y Receptor Type 2	P49146	1057	RGELVPDPEPIDST	Homo sapiens
1162	3404	Neuropeptide Y Receptor Type 2	P49146	1058	CIVYHLESKISKRISF	Homo sapiens
1163	3404	Neuropeptide Y Receptor Type 2	P49146	1059	REYSLEIIPDFEIVAC	Homo sapiens
1164	3404	Neuropeptide Y Receptor Type 2	P49146	1060	NDHYHQRRQKTKMLVC	Homo sapiens
1165	3404	Neuropeptide Y Receptor Type 2	P49146	1061	CEQRDLAIHSEVSVTFKAKK	Homo sapiens
1166	3404	Neuropeptide Y Receptor Type 2	P49146	2297	MGPIGAEADENQTV EEMKVE	Homo sapiens
1167	3404	Neuropeptide Y Receptor Type 2	P49146	2298	SEVSVTFKAKKNLEVRKNSG	Homo sapiens
1168	3405	Neuropeptide Y Receptor Type 4	P50391	1068	CVTVRQKEKANVTNLL	Homo sapiens
1169	3405	Neuropeptide Y Receptor Type 4	P50391	1069	KNHSALEFLADKVC	Homo sapiens
1170	3405	Neuropeptide Y Receptor Type 4	P50391	1070	CYARIVRRLQRQRVFKHG	Homo sapiens

1171	3405	Type 4 Neuropeptide Y Receptor	P50391	1071	CQQSAPLESEHLPLST	Homo sapiens
1172	3405	Type 4 Neuropeptide Y Receptor	P50391	2275	SEHCQDSVDVMVFVTS	Homo sapiens
1173	3406	Type 4 Neuropeptide Y Receptor	Q15761	1072	MKKRNQKTTVMFLGN	Homo sapiens
1174	3406	Type 5 Neuropeptide Y Receptor	Q15761	1073	CGLSNKENRLEENEMI	Homo sapiens
1175	3406	Type 5 Neuropeptide Y Receptor	Q15761	1074	NLTLPSSKSGPQVKL	Homo sapiens
1176	3406	Type 5 Neuropeptide Y Receptor	Q15761	1075	SFIKKHRRRRYSKKTAC	Homo sapiens
1177	3406	Type 5 Neuropeptide Y Receptor	Q15761	1076	PERPSQENHSRILPEN	Homo sapiens
1178	3406	Type 5 Neuropeptide Y Receptor	Q15761	1077	CFEIKPEENSVDVHEL RV	Homo sapiens
1179	3408	Neurotensin Receptor Type 1	P30989	935	RVLAAPSSSELDVNTDIYS	Homo sapiens
1180	3408	Neurotensin Receptor Type 1	P30989	936	CHPFKAKTLMRSRTIKK	Homo sapiens
1181	3408	Neurotensin Receptor Type 1	P30989	937	GEGNRSADGGQHAGGLVC	Homo sapiens
1182	3408	Neurotensin Receptor Type 1	P30989	938	RQAAEQGGQVCTVGGEHS	Homo sapiens
1183	3408	Neurotensin Receptor Type 1	P30989	939	CPVWRRRRRKRPAFSRKADS	Homo sapiens
1184	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	940	CHPIRALDVRTSSKAQA	Homo sapiens
1185	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	941	PVAIMGSAQVEDEEIEC	Homo sapiens
1186	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	942	GVQPSSETAVAILRFC	Homo sapiens
1187	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	943	CASALRRDVQVSDRVSIAK	Homo sapiens
1188	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2123	TPEPRPTQPMASPRLGTC	Homo sapiens
1189	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2124	TAVASLLKGRQGIYE	Homo sapiens

1190	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2125	EMQTDINGGSLKPVRTAAK	Homo sapiens
1191	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2126	CSLGFQSPRKEIQWES	Homo sapiens
1192	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2127	SEGSDASTIEHTASESC	Homo sapiens
1193	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2128	NPASGKVSVQVGGQTSD	Homo sapiens
1194	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1486	CKKLHPLKAGNDLDISRIK	Homo sapiens
1195	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1500	KIVKPLWTSFIGSVSYSKLL	Homo sapiens
1196	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1502	TAITKKIFKSHLKSSRNSTS	Homo sapiens
1197	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1503	VKKKSSRNIFSIVFVFFVC	Homo sapiens
1198	3582	Oxytocin Receptor	CAA46097.1	244	AEGNRTAGPPRRNEALARVE	Homo sapiens
1199	3582	Oxytocin Receptor	CAA46097.1	245	RLAVLATWLGCLVASAP	Homo sapiens
1200	3582	Oxytocin Receptor	CAA46097.1	246	PEGAAAGDGGRRVALAR	Homo sapiens
1201	3582	Oxytocin Receptor	CAA46097.1	247	YLGRRRLGETASKKSNSS	Homo sapiens
1202	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	854	MQRIGDVLGSSEDFRR	Homo sapiens
1203	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	855	ARGGRVTCCHDTSAPEL	Homo sapiens
1204	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	856	KPAYGTSGGLPRAKIK	Homo sapiens
1205	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	857	TGPSPATPARRRLGLRRSD	Homo sapiens
1206	3595	Purinergic Receptor P2Y1	CAA07339.1	386	RYSGVVVPLKSLGRLKKKN	Homo sapiens
1207	3595	Purinergic Receptor P2Y1	CAA07339.1	387	SGTGVKKNKTTTCYD	Homo sapiens
1208	3595	Purinergic Receptor P2Y1	CAA07339.1	388	RALYKDLNNSPLRRKS	Homo sapiens
1209	3595	Purinergic Receptor P2Y1	CAA07339.1	389	DTFRRRLSRATRKASRRSE	Homo sapiens
1210	3596	Purinergic Receptor P2Y5	P43657	850	FVQSTHSQGNINASEAC	Homo sapiens
1211	3596	Purinergic Receptor P2Y5	P43657	851	MVLKTLTKPVTLSRSKI	Homo sapiens
1212	3596	Purinergic Receptor P2Y5	P43657	852	TQNSIKMKINWSVRRSD	Homo sapiens
1213	3596	Purinergic Receptor P2Y5	P43657	853	SEVHGAENFIQHNLQTLK	Homo sapiens
1214	3597	Purinergic Receptor P2Y6	Q15077	874	CTSRRLTRTAVYTLN	Homo sapiens
1215	3597	Purinergic Receptor P2Y6	Q15077	875	AQERRGKAARMAVVV	Homo sapiens

1216	3597	Purinergic Receptor P2Y6	Q15077	876	TKTAYLAVRSTPGVPC	Homo sapiens
1217	3597	Purinergic Receptor P2Y6	Q15077	877	KKFRRRPHELLQKLIATK	Homo sapiens
1218	3597	Purinergic Receptor P2Y6	Q15077	2726	CHPLAPWHKRGGRRAAW	Homo sapiens
1219	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	870	CFRMKMRSETAIFTN	Homo sapiens
1220	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	871	RTLKRPATLSQIGTNKK	Homo sapiens
1221	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	872	ESFQKSFYINAHIRMES	Homo sapiens
1222	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	873	KTEIPLTKPSLPAIQEE	Homo sapiens
1223	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	1895	SSLRPRLGNATANNTCIVD	Homo sapiens
1224	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	248	KAKVQCELNITAQLOEGE	Homo sapiens
1225	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	249	ESLIMQDDPQNSIEATSVDK	Homo sapiens
1226	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	250	NSEQDCLPHSFHEETKE	Homo sapiens
1227	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	251	EETKEDSGRQGGDILMEKPS	Homo sapiens
1228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	761	CEKRLKEVLQRPASIMESDK	Homo sapiens
1229	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	762	ESEEDKEAPTGSRYRGRPC	Homo sapiens
1230	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	763	LYSGATLDEAERLTEEEELR	Homo sapiens
1231	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	765	KDDGFLNGSCSGLDEEASG	Homo sapiens
1232	3732	PACAP Receptor Type 1	P41586	944	CLEKIQRANELMGFNDSS	Homo sapiens
1233	3732	PACAP Receptor Type 1	P41586	945	CPELFRIFNPDPQVWETET	Homo sapiens
1234	3732	PACAP Receptor Type 1	P41586	946	DSNSLDLSDMGVVSRLNC	Homo sapiens
1235	3732	PACAP Receptor Type 1	P41586	948	IKRKWRSWKVNRVFAVD	Homo sapiens
1236	3732	PACAP Receptor Type 1	P41586	2292	ESDFGDSNSLDLSDMGVVSRL	Homo sapiens
1237	3844	Apelin Receptor	AAA18954.1	62	RTTGDLENTTKVQC	Homo sapiens
1238	3844	Apelin Receptor	AAA18954.1	63	RSSREKRPSADIFIAS	Homo sapiens
1239	3844	Apelin Receptor	AAA18954.1	64	QTIAGHFHFRKERIEGLRKRRL	Homo sapiens
1240	3844	Apelin Receptor	AAA18954.1	65	GPNNMGKGGEQMHEKSIPIYSQ	Homo sapiens

1241	3845	Chemokine-Like Receptor 1 (CMKLR1)	LR39	447	RMEDEDYNTSISYGDEYPD	Homo sapiens
1242	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	448	DSIVVLEDLSPLEARVTR	Homo sapiens
1243	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	449	LTIVCKLHRNRLAKTKKPFK	Homo sapiens
1244	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	450	RSFTKMSSMNERTSMNERE	Homo sapiens
1245	3846	Spingolipid Receptor Edg1	AAA52336.1	1010	TRSRRLTRKNISKASRSSE	Homo sapiens
1246	3846	Spingolipid Receptor Edg1	AAA52336.1	1011	CPSGDSAGKFKRPIIAG	Homo sapiens
1247	3846	Spingolipid Receptor Edg1	AAA52336.1	1012	CPSGDSAGKFKRPIIAGME	Homo sapiens
1248	3846	Spingolipid Receptor Edg1	AAA52336.1	1013	RSKSDNSSHPQKDEGD	Homo sapiens
1249	3847	Spingolipid Receptor Edg3	Q99500	1028	ERHLTMIKMIRPYDANK	Homo sapiens
1250	3847	Spingolipid Receptor Edg3	Q99500	1029	LVKSSSRKVANHNNSE	Homo sapiens
1251	3847	Spingolipid Receptor Edg3	Q99500	1030	SPKVKEDLPHTDPSSC	Homo sapiens
1252	3847	Spingolipid Receptor Edg3	Q99500	1031	CLVRGRGARASPIQPALD	Homo sapiens
1253	3847	Spingolipid Receptor Edg3	Q99500	1752	REHYQVWGKLAGRLKEASE	Homo sapiens
1254	3848	C-C Chemokine Receptor 9	P51686	958	RAHTWREKRLLYSKMVC	Homo sapiens
1255	3848	C-C Chemokine Receptor 9	P51686	959	KEESGIAICTMVVPSDEST	Homo sapiens
1256	3848	C-C Chemokine Receptor 9	P51686	960	QAKSSKHKALKVTIT	Homo sapiens
1257	3848	C-C Chemokine Receptor 9	P51686	961	GERFRDLVKTILNLGC	Homo sapiens
1258	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	74	ENYSYDLDYSLSDLEEK	Homo sapiens
1259	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	75	RDTVEFNNHTLCYNNFQKHD	Homo sapiens
1260	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	76	SKKFQARFRSSVAEILK	Homo sapiens
1261	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	77	GTVSEQLRNSETKNLC	Homo sapiens
1262	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1087	HPLRRRISRLSAYAV	Homo sapiens
1263	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1088	CEEFWGSQERQRQLYA	Homo sapiens
1264	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1089	SYVRVSVKLRNRVVP GC	Homo sapiens
1265	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1090	CVTQSQADWDRAARRR	Homo sapiens
1266	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1091	DSFREELRKLVAWPRIKA	Homo sapiens

1267	3851	Receptor 10 (GPR10) G Protein-Coupled Receptor GPR12	AAA91630.1	78	GCI PSSLAQRARSPSD	Homo sapiens
1268	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	79	ENISAAVSSRVP AVEPEPE	Homo sapiens
1269	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	307	STCSVVRPLTKNNAA	Homo sapiens
1270	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	308	QSEATKLV TIGLIVAS	Homo sapiens
1271	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	84	KQKENEC LGDYPEVLQE	Homo sapiens
1272	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	85	SMNNRTVQHGV TISL	Homo sapiens
1273	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	86	ETLKLYDFFPSCDMRKDLR	Homo sapiens
1274	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	87	GRSVHVD FSSSESQSRHGS	Homo sapiens
1275	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1511	CLKNYDFGSS TETSDSHLTK	Homo sapiens
1276	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1512	KALSTIHAEDFARRRKRS	Homo sapiens
1277	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1612	ATSPNSDI RETHSHVP	Homo sapiens
1278	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1613	LMGALHF KPGSRRLID	Homo sapiens
1279	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1615	GLPTLLSREL TUDDKPYC	Homo sapiens
1280	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	93	DRYMAIVQ PKYAKELKNTC	Homo sapiens
1281	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	94	KDPDKDSTP ATCLKISD	Homo sapiens
1282	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	95	GRTSKLPKVK EKSIR	Homo sapiens
1283	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	96	RNYLRS LRKRSFRSGSLR	Homo sapiens
1284	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	97	KVSR EKAKK MIAASWIFD	Homo sapiens
1285	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	98	DGRTVRR TMINIVPRTKVK	Homo sapiens

1286	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	99	RRGMKETFCMSSMKC	Homo sapiens
1287	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	100	KTITKDSYDSFDREAKEKK	Homo sapiens
1288	3856	G Protein-Coupled Receptor GPR2/CCRI10	P46092	1152	ALLFSQDGGQREGQRR	Homo sapiens
1289	3856	G Protein-Coupled Receptor GPR2/CCRI10	P46092	1153	SGDEEDAYSAEPLPELC	Homo sapiens
1290	3856	G Protein-Coupled Receptor GPR2/CCRI10	P46092	1154	ALLDTADLLAARERC	Homo sapiens
1291	3856	G Protein-Coupled Receptor GPR2/CCRI10	P46092	1155	RRLRGSSPSGPQRRGC	Homo sapiens
1292	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	101	KGSGRHHLSAGPHALTQ	Homo sapiens
1293	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	102	RTNASGLEVPLFLFARLDE	Homo sapiens
1294	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	103	SRPGLLHQGRQRRVRAMQ	Homo sapiens
1295	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	104	GQHGEPSSGDDVSMHRSS	Homo sapiens
1296	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	105	SERQARFSSQSGETGEVQAC	Homo sapiens
1297	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	106	DPYTVRSKGPLNGC	Homo sapiens
1298	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	107	NSTLDGNQSSHPFCLL	Homo sapiens
1299	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	108	CASQTANDPYTVRSK	Homo sapiens
1300	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	109	EINMQSESNITVRDDIDD	Homo sapiens
1301	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	111	RRAVKRHRERRERQKRVRM	Homo sapiens
1302	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	112	TRQKFQKVLKSKMKKR	Homo sapiens
1303	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	113	DPKRNKKTIFEDSEIREKR	Homo sapiens
1304	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1532	CAPGQGGRRWRPLQPAWVEG	Homo sapiens
1305	3860	G Protein-Coupled	AAH01736.1	1533	EASLLPTGPNASNTSDGPDN	Homo sapiens



1306	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1539	KGVGRAVGLGGSGCQATE	Homo sapiens
1307	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1565	RMITSSVAPASQIRSLRTKR	Homo sapiens
1308	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1567	RAVSNAQTADERTESKG	Homo sapiens
1309	3861	Receptor SLC/MCH1 G Protein-Coupled	O00155	376	RGLQLPLPGGQDSQCCEEP	Homo sapiens
1310	3861	Receptor GPR25 G Protein-Coupled	O00155	377	CRISRRRLRPPHVGRARRNS	Homo sapiens
1311	3861	Receptor GPR25 G Protein-Coupled	O00155	378	RTGRLARRISSASSLSRDD	Homo sapiens
1312	3861	Receptor GPR25 G Protein-Coupled	O00155	483	DYSGLDGLEELELCPAD	Homo sapiens
1313	3862	Receptor GPR25 G Protein-Coupled	AAB60402.1	118	TVCLLGDAHSPLYT	Homo sapiens
1314	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	119	EGPTGPAAPLPSPKAWD	Homo sapiens
1315	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	120	HFAAVFCIGSAEMSL	Homo sapiens
1316	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	121	GLTTCGVVYPLSKNH	Homo sapiens
1317	3863	Receptor GPR3 G Protein-Coupled	O00270	1157	REPEKQPKLQRAQALVTLV	Homo sapiens
1318	3863	Receptor GPR31 G Protein-Coupled	O00270	1158	CHSFYSRADGFSFIWQEA	Homo sapiens
1319	3863	Receptor GPR31 G Protein-Coupled	O00270	1159	QNLGSCRALCAVAHTSDVTG	Homo sapiens
1320	3863	Receptor GPR31 G Protein-Coupled	O00270	1160	SPTFRSSYRRVFHTLRGKGQ	Homo sapiens
1321	3864	Receptor GPR31 G Protein-Coupled	AAA98457.1	143	DELFRDRYNHTFCFEKFPME	Homo sapiens
1322	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	144	LRAVRGSVSTERQEKAKIKR	Homo sapiens
1323	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	145	RSDVAKALHNLLRFLASDK	Homo sapiens
1324	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	146	NASLTLEIPLISKRNSTAK	Homo sapiens

1325	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	166	FQYLVPSQTVSLTVG	Homo sapiens
1326	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	167	CLAERAACSVVRPLARSH	Homo sapiens
1327	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	168	HLVVRICQVWRHAH	Homo sapiens
1328	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	169	EIQRALWLLCGCFQSK	Homo sapiens
1329	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	171	ATAESRRVAGRTVSAAR	Homo sapiens
1330	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	172	RLDDEQGRRQCCLVFPQPE	Homo sapiens
1331	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	173	RLHAMRLDSHAKALERAKKR	Homo sapiens
1332	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	174	DASFRNLRQLITC	Homo sapiens
1333	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	175	NVSQDNGTGHNAFSEP	Homo sapiens
1334	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	176	RSRHMPWRTYRGAKVAS	Homo sapiens
1335	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	177	VRLRSGAKALGKARRK	Homo sapiens
1336	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	178	LDDNFRKNFRSILRC	Homo sapiens
1337	3869	G Protein-Coupled Receptor HM74	BAA01721.1	179	QDHFLEIDKKNCVFRDD	Homo sapiens
1338	3869	G Protein-Coupled Receptor HM74	BAA01721.1	180	ARIWLSLRQRMMDRHAKIKR	Homo sapiens
1339	3869	G Protein-Coupled Receptor HM74	BAA01721.1	181	CLQRKMTGEPDNNRSTVE	Homo sapiens
1340	3869	G Protein-Coupled Receptor HM74	BAA01721.1	182	DPNKTRGAPEALMANSGE	Homo sapiens
1341	3869	G Protein-Coupled Receptor HM74	BAA01721.1	183	SNNHKKGHCHQEPASLEKQ	Homo sapiens
1342	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1453	RQRQMDRHAKIKRAITFIMV	Homo sapiens
1343	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1454	SPSYLGPTSNNHKKKG	Homo sapiens
1344	3870	G Protein-Coupled	Q15743	1192	AVRRSHGTQSKRKDQI	Homo sapiens

1345	3870	Receptor OGR1	Q15743	1193	LMHEEVIEDENQHRVC	Homo sapiens
1346	3870	G Protein-Coupled Receptor OGR1	Q15743	1194	CFVSETHRDARLRG	Homo sapiens
1347	3870	G Protein-Coupled Receptor OGR1	Q15743	1195	CSRTGRAREAYPLGAPEASG	Homo sapiens
1348	3921	Prostaglandin Receptor	P43119	1188	CRMYRQQKRHQGSLGPRPRT	Homo sapiens
1349	3921	Prostaglandin Receptor	P43119	1189	CFTQAVAPDSSEMMD	Homo sapiens
1350	3921	Prostaglandin Receptor	P43119	1190	ASGRDPRAPSAVPGKEGSC	Homo sapiens
1351	3921	Prostaglandin Receptor	P43119	1191	SAWGEQVEPLPPTQQ	Homo sapiens
1352	3923	Prostaglandin D2 Receptor	Q13258	458	KSPFYRCQNTTSVEKGN SAV	Homo sapiens
1353	3923	Prostaglandin D2 Receptor	Q13258	459	RNLYAMHRRLLQRHPRSC	Homo sapiens
1354	3923	Prostaglandin D2 Receptor	Q13258	503	CAEPRADGREASQPLEEL	Homo sapiens
1355	3923	Prostaglandin D2 Receptor	Q13258	504	KDVKEKNRTSEEAEIDLRLR	Homo sapiens
1356	3924	Prostaglandin E Receptor	P34995	962	AQAAGRLRRRSATTF	Homo sapiens
1357	3924	Prostaglandin E Receptor	P34995	963	CVGVTRPLLHAARVSVARAR	Homo sapiens
1358	3924	Prostaglandin E Receptor	P34995	964	CNTLSGLALHRARWRR	Homo sapiens
1359	3924	Prostaglandin E Receptor	P34995	965	ASGPDSRRRRWGAGHPR	Homo sapiens
1360	3924	Prostaglandin E Receptor	P34995	966	SGSARRARAHDMVMVGQ	Homo sapiens
1361	3925	Prostaglandin E Receptor	AAD44177.1	967	IALALLARRWRGDIVGC	Homo sapiens
1362	3925	Prostaglandin E Receptor	AAD44177.1	968	CETRQWLPPGESPAISSV	Homo sapiens
1363	3925	Prostaglandin E Receptor	AAD44177.1	969	GPSLGSGRGPGARRRGE	Homo sapiens
1364	3925	Prostaglandin E Receptor	AAD44177.1	971	NETSSRKEKWDLQALR	Homo sapiens
1365	3926	Prostaglandin E2 Receptor	CAB52459.1	972	ERSAEARGNLTRPPGSGEDC	Homo sapiens
1366	3926	Prostaglandin E2 Receptor	CAB52459.1	973	SRSYRRRESKRKKSFLLC	Homo sapiens
1367	3926	Prostaglandin E2 Receptor	CAB52459.1	974	CRAKATASQSSAQWGR	Homo sapiens

1368	3926	EP3 Prostaglandin E2 Receptor EP3	CAB52459.1	975	KFCQVANAVSSCSNDGQ	Homo sapiens
1369	3927	Prostaglandin E Receptor EP4	P35408	382	RLSDFRRRRSFRRIAGAE	Homo sapiens
1370	3927	Prostaglandin E Receptor EP4	P35408	383	EREVSKNPDLQAIRAS	Homo sapiens
1371	3927	Prostaglandin E Receptor EP4	P35408	384	DSQRTSSAMSGHSRSFSIRE	Homo sapiens
1372	3927	Prostaglandin E Receptor EP4	P35408	385	RTLRISETSDSSQGQDSE	Homo sapiens
1373	3928	Prostaglandin F2-alpha Receptor	P43088	1046	ILMKAYQRFQKSKAS	Homo sapiens
1374	3928	Prostaglandin F2-alpha Receptor	P43088	1047	ASDKEWIRFDQSNVLC	Homo sapiens
1375	3928	Prostaglandin F2-alpha Receptor	P43088	1048	TKPIFHTKITSKHVK	Homo sapiens
1376	3928	Prostaglandin F2-alpha Receptor	P43088	1049	CFYNTEIDKDWEDRFY	Homo sapiens
1377	3928	Prostaglandin F2-alpha Receptor	P43088	1050	RVKFKSQQHRQGRSHILE	Homo sapiens
1378	4051	Proteinase-Activated Receptor 2	AAB47871.1	252	QGTNRSSKGRSLGKVDGTS	Homo sapiens
1379	4051	Proteinase-Activated Receptor 2	AAB47871.1	253	QRYWVIVNPMGHSRKKAN	Homo sapiens
1380	4051	Proteinase-Activated Receptor 2	AAB47871.1	255	SHDFRDHAKNALLCRSVR	Homo sapiens
1381	4051	Proteinase-Activated Receptor 2	AAB47871.1	256	VSLTSKKHSRKSSSYS	Homo sapiens
1382	4052	Proteinase-Activated Receptor 3	AAC51218.1	257	ENDTNNLAKPTLPKTFR	Homo sapiens
1383	4052	Proteinase-Activated Receptor 3	AAC51218.1	258	CPEESASHLHVKNATMG	Homo sapiens
1384	4052	Proteinase-Activated Receptor 3	AAC51218.1	260	QPDITTCDDVHNTCESSSP	Homo sapiens
1385	4052	Proteinase-Activated Receptor 3	AAC51218.1	261	MSKTRNHSTAYLTK	Homo sapiens
1386	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	88	RDHKSGETPANVFLMH	Homo sapiens

1387	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	90	RSLRQGLRVEKRLTKAVR	Homo sapiens
1388	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	91	RSHGASCATQRILANR	Homo sapiens
1389	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	92	FEGKTNESSLSAKSE	Homo sapiens
1390	4254	Rhodopsin	P08100	1051	RNCMLTICCGKNPLGD	Homo sapiens
1391	4254	Rhodopsin	P08100	1052	CGIDYYTLKPEVNNESFVI	Homo sapiens
1392	4254	Rhodopsin	P08100	1053	CWVPYASVAFYIFTHQGSN	Homo sapiens
1393	4254	Rhodopsin	P08100	1055	VLGGFTISLYTSLHGY	Homo sapiens
1394	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1042	ATSSLLRRWPYGSDDG	Homo sapiens
1395	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1043	CTLDYSKGDNRNFTSFL	Homo sapiens
1396	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1044	MEQKLGKSGHLQVNTT	Homo sapiens
1397	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1045	MVCRGIWQCLSPQKRE	Homo sapiens
1398	4321	Secretin Receptor	P47872	950	CLQELSRQETGDLGTEQ	Homo sapiens
1399	4321	Secretin Receptor	P47872	951	CPFRMLTSLRNGSLFRN	Homo sapiens
1400	4321	Secretin Receptor	P47872	952	CGVNVNDSSNEKRHSY	Homo sapiens
1401	4321	Secretin Receptor	P47872	954	KDAVLFSSDDVTYCDAAH	Homo sapiens
1402	4321	Secretin Receptor	P47872	956	MRLKRTQETIRGNEVSH	Homo sapiens
1403	4480	Somatostatin Receptor Type 1	P30872	994	EEPGRNASQNGTLSEG	Homo sapiens
1404	4480	Somatostatin Receptor Type 1	P30872	996	CLSWMDNAAEEPVDY	Homo sapiens
1405	4480	Somatostatin Receptor Type 1	P30872	997	EDFQPENLESQGVFRNGTC	Homo sapiens
1406	4480	Somatostatin Receptor Type 1	P30872	2616	LSVDAVNMFTSYC	Homo sapiens
1407	4480	Somatostatin Receptor Type 1	P30872	2618	RAYSVEDFQPENILES	Homo sapiens
1408	4481	Somatostatin Receptor Type 2	P30874	998	RSNQWGRSSCTINWPGE	Homo sapiens
1409	4481	Somatostatin Receptor Type 2	P30874	999	KVKSSGIRVGSSKRKKE	Homo sapiens
1410	4481	Somatostatin Receptor Type 2	P30874	1000	CLVKVSGTDDGERSDS	Homo sapiens

1411	4481	2	Somatostatin Receptor Type	P30874	1001	KQDKSRJNETTETQRT	Homo sapiens
1412	4481	2	Somatostatin Receptor Type	P30874	2276	DMADEPLNGSHTWLSIP	Homo sapiens
1413	4482	2	Somatostatin Receptor Type	P32745	1002	KVRSAGRRVWAPSCQR	Homo sapiens
1414	4482	3	Somatostatin Receptor Type	P32745	2622	REGGKGKEMNGRVSQI	Homo sapiens
1415	4482	3	Somatostatin Receptor Type	P32745	2624	TTSEPENASSAWPPD	Homo sapiens
1416	4482	3	Somatostatin Receptor Type	P32745	2626	QPGTSGQERPPSRVA	Homo sapiens
1417	4483	3	Somatostatin Receptor Type	P31391	1007	IFADTRPARGGQAVAC	Homo sapiens
1418	4483	4	Somatostatin Receptor Type	P31391	1008	CLLEGAGGAEEEEPLDY	Homo sapiens
1419	4483	4	Somatostatin Receptor Type	P31391	2627	KMRAVALRAGWQQRR	Homo sapiens
1420	4483	4	Somatostatin Receptor Type	P31391	2631	CRAVLSVDGLNMFTSV	Homo sapiens
1421	4483	4	Somatostatin Receptor Type	P31391	2633	CLVGLVGNALVIFVIL	Homo sapiens
1422	4484	4	Somatostatin Receptor Type	NP_001044.1	2637	SLPLLVFADVQEGGTC	Homo sapiens
1423	4484	5	Somatostatin Receptor Type	NP_001044.1	2638	CLRKGSGAKDADATEP	Homo sapiens
1424	4484	5	Somatostatin Receptor Type	NP_001044.1	2639	RIRQQQEATPPAHRAAA	Homo sapiens
1425	4484	5	Somatostatin Receptor Type	NP_001044.1	2643	RVAKLASAAA WVL SLC	Homo sapiens
1426	4552	5	Tachykinin Receptor 1	AAA36641.1	1339	CMIEWPEHPNKIYEKV	Homo sapiens
1427	4552	Tachykinin Receptor 1	AAA36641.1	1340	CPFISAGDYEGLMKSTRYL	Homo sapiens	
1428	4552	Tachykinin Receptor 1	AAA36641.1	1341	KVSRLETTISTVVGAAHEE	Homo sapiens	
1429	4552	Tachykinin Receptor 1	AAA36641.1	1342	EPEDGPKATPSSLDLT SNC	Homo sapiens	
1430	4687	Thrombin Receptor	P25116	1202	EDEEKNESGLTEYRLV	Homo sapiens	
1431	4687	Thrombin Receptor	P25116	2582	AVANRSKKSRALFLSAAVFC	Homo sapiens	
1432	4687	Thrombin Receptor	P25116	2583	SINKSSPLQKQLPAFISE	Homo sapiens	

1433	4687	Thrombin Receptor	P25116	2621	DPRSFLLRNPNDKYEPFWE	Homo sapiens
1434	4734	Thyrotropin Releasing Hormone Receptor	P34981	1196	PSDPKENSKTWKNDS	Homo sapiens
1435	4734	Thyrotropin Releasing Hormone Receptor	P34981	1197	CFNSTVSSRKQVTKMLA	Homo sapiens
1436	4734	Thyrotropin Releasing Hormone Receptor	P34981	1198	RAAFRKLNCNCKQKPT	Homo sapiens
1437	4734	Thyrotropin Releasing Hormone Receptor	P34981	1199	KPANYSVALNYSVIKE	Homo sapiens
1438	4734	Thyrotropin Releasing Hormone Receptor	P34981	1200	KESDHFSTELDDITVTD	Homo sapiens
1439	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1771	EIQKNKPRNDIDFKII	Homo sapiens
1440	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1772	SYRPSDNVSSSTKKPAPC	Homo sapiens
1441	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1773	LNSSTEDGIKRIQDDC	Homo sapiens
1442	4946	Angiotensin II Type 2 Receptor	P50052	1321	CSQKPSDKHILDAIPIL	Homo sapiens
1443	4946	Angiotensin II Type 2 Receptor	P50052	1322	DRYQSVIYPFLSQRRN	Homo sapiens
1444	4946	Angiotensin II Type 2 Receptor	P50052	1323	RKHLTKTNSYGNRITRD	Homo sapiens
1445	4946	Angiotensin II Type 2 Receptor	P50052	1324	RVPITWLQGGKRESMSC	Homo sapiens
1446	5072	Pyrimidinergic Receptor P2Y4	P51582	1142	CHDTTRPEEFDHYVHFSSA	Homo sapiens
1447	5072	Pyrimidinergic Receptor P2Y4	P51582	1145	YLLTGDKYRRQLRQLC	Homo sapiens
1448	5072	Pyrimidinergic Receptor P2Y4	P51582	2696	HPLRALRWGRPRLAG	Homo sapiens
1449	5072	Pyrimidinergic Receptor P2Y4	P51582	2697	HIITRTIYLLARLLEADC	Homo sapiens
1450	5117	Vasopressin V1A Receptor	AAA62271.1	262	REAEALGEGNGPPRDVRNEE	Homo sapiens
1451	5117	Vasopressin V1A Receptor	AAA62271.1	263	NVRGKTASRQSKGAEQ	Homo sapiens
1452	5117	Vasopressin V1A Receptor	AAA62271.1	264	QNMKEKFNKEDTDSMSRRQ	Homo sapiens
1453	5117	Vasopressin V1A Receptor	AAA62271.1	265	RQTFYSNINRSTNSTGMWKD	Homo sapiens
1454	5118	Vasopressin V1B Receptor	AAA65687.1	266	NATPWLGRRDEELAKVE	Homo sapiens
1455	5118	Vasopressin V1B Receptor	AAA65687.1	267	TRGLPSRVSSINTISRAKIR	Homo sapiens

1456	5118	Vasopressin V1B Receptor	AAA65687.1	268	QPRMRRRLSDGSLSRH	Homo sapiens
1457	5118	Vasopressin V1B Receptor	AAA65687.1	269	ESPRDLELADGEGTAET	Homo sapiens
1458	5119	Vasopressin V2 Receptor	CAA77746.1	270	SNSSQERPLDTRDPLLRAE	Homo sapiens
1459	5119	Vasopressin V2 Receptor	CAA77746.1	271	RHGSGAHWNRPVLVAWAFS	Homo sapiens
1460	5119	Vasopressin V2 Receptor	CAA77746.1	272	CQVLIFREIHASLVPGPSE	Homo sapiens
1461	5119	Vasopressin V2 Receptor	CAA77746.1	273	RGRTPPSLGPQDESC	Homo sapiens
1462	5133	Peropsin	O14718	1147	KNEDGSVFSQTEHNIV	Homo sapiens
1463	5133	Peropsin	O14718	1148	IKYKELRTPINAIIIN	Homo sapiens
1464	5133	Peropsin	O14718	1149	RKNDRSFVSYTMIVIA	Homo sapiens
1465	5133	Peropsin	O14718	1150	CTESLNIRDWSDQIDVTK	Homo sapiens
1466	5133	Peropsin	O14718	1151	VANKKFRRAMLAMIFKC	Homo sapiens
1467	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	987	CGPAGRTSSRSQSLRSTDAR	Homo sapiens
1468	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	988	EENRDKWEEAQLAGPN	Homo sapiens
1469	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	989	CRVVDREQEEGNGDSGG	Homo sapiens
1470	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	990	KRDKAPKSSFVGDGDI	Homo sapiens
1471	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	991	RKLQHAAEKDKEVLGP	Homo sapiens
1472	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	981	CLRPSPEEAVAQAESEVGR	Homo sapiens
1473	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	982	GSSNDLFTTEMRYGEE	Homo sapiens
1474	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	983	MARDGISDKSKQQRAGSERC	Homo sapiens
1475	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	984	EDAPRARPEGTPRRAAK	Homo sapiens
1476	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	985	RSRTIMPRTVPGSTMKMGSL	Homo sapiens
1477	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	986	KREKRWSVSSGGAAERSVC	Homo sapiens
1478	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	976	RRVFPTNFPGLQKKGE	Homo sapiens
1479	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	977	CNLTREAKRPPKEEFG	Homo sapiens
1480	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	978	KLKHRAGQMSEPHSGLTKC	Homo sapiens



1481	5521	Inhibitor 3			979	CTDDNLRGADMDIVHPQER	Homo sapiens
1482	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242		980	SRSETGSTISMSSLERR	Homo sapiens
1483	6031	SIV/HIV Receptor BONZO	O00574		1101	NDSSQEEHQDFLQFSK	Homo sapiens
1484	6031	SIV/HIV Receptor BONZO	O00574		1102	KATKAYNQQAARMTWG	Homo sapiens
1485	6031	SIV/HIV Receptor BONZO	O00574		1103	KTLLHAGGFQKHRSLK	Homo sapiens
1486	6031	SIV/HIV Receptor BONZO	O00574		1104	SLKFRKNFWKLVKDIGC	Homo sapiens
1487	6031	SIV/HIV Receptor BONZO	O00574		1105	KSSDNSKTFASAHNV	Homo sapiens
1488	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1		66	ERHRSVMAVQLHSRLPRGR	Homo sapiens
1489	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1		67	RRRVQRMAEHVVSCHPRVRE	Homo sapiens
1490	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1		68	NAAVYSCRDAEMRRTERR	Homo sapiens
1491	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1		69	RQSTRESVHYTSSAQGGAST	Homo sapiens
1492	6213	C-C Chemokine Receptor 5	AAC50598.1		38	YSQYQFWKNFQTLK	Homo sapiens
1493	6213	C-C Chemokine Receptor 5	AAC50598.1		39	QQEAPERASSVYTRSTGEQE	Homo sapiens
1494	6213	C-C Chemokine Receptor 5	AAC50598.1		40	RSQKEGLHYTCSHFPSQ	Homo sapiens
1495	6213	C-C Chemokine Receptor 5	AAC50598.1		309	MDYQVSSPIYDINVTSEPC	Homo sapiens
1496	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421		1092	EDEYDVLIERGELESDAEQC	Homo sapiens
1497	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421		1093	KGNFFSARRRVPCGIITSVL	Homo sapiens
1498	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421		1094	MIRKTLRFREQRYSLFLVFA	Homo sapiens
1499	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421		1096	RSNITPLQPRGQSAQGSRE	Homo sapiens
1500	6446	Pael Receptor (GPR37)	AAC51281.1		127	GPGNSARDVLARAPREEQG	Homo sapiens
1501	6446	Pael Receptor (GPR37)	AAC51281.1		129	DPGGPRRGNSINRRVRLKNP	Homo sapiens
1502	6446	Pael Receptor (GPR37)	AAC51281.1		130	LRQLSKEDLGFSGRAPAERC	Homo sapiens
1503	6446	Pael Receptor (GPR37)	AAC51281.1		131	PRGAVISGRSQEQSVKTVPG	Homo sapiens
1504	6446	Pael Receptor (GPR37)	AAC51281.1		1781	CIQKSTVTSDDDNDNEYTE	Homo sapiens
1505	6446	Pael Receptor (GPR37)	AAC51281.1		1806	CIQKSTVTSDDDNDNEYTE	Homo sapiens
1506	6536	Putative Neurotransmitter Receptor (PNR)	NP_005293.1 O14804		319	TDVVETRLSQWLEEMPC	Homo sapiens

1507	6536	Putative Neurotransmitter Receptor (PNR)	O14804	320	KSLAGAAKHERKAAKT	Homo sapiens
1508	6536	Putative Neurotransmitter Receptor (PNR)	O14804	321	RKALKLTLSQKVFSPQTR	Homo sapiens
1509	6536	Putative Neurotransmitter Receptor (PNR)	O14804	485	HPAAFCYQVNGSCPR	Homo sapiens
1510	6777	G Protein-Coupled Receptor TM7SF1	O60478	788	KAKSKYSPELLKYRLP	Homo sapiens
1511	6777	G Protein-Coupled Receptor TM7SF1	O60478	790	KTGNWERKVIVSVRVA	Homo sapiens
1512	6777	G Protein-Coupled Receptor TM7SF1	O60478	791	KSVHSFDYDWNVSDQAD	Homo sapiens
1513	6777	G Protein-Coupled Receptor TM7SF1	O60478	792	RVRNPTKDLTNPGMVP	Homo sapiens
1514	6777	G Protein-Coupled Receptor TM7SF1	O60478	793	RYDSDDDLAWNIAQQGLQ	Homo sapiens
1515	6853	Purinergic Receptor P2Y11	O43190	865	PTLSFHLKRPQQGAGNC	Homo sapiens
1516	6853	Purinergic Receptor P2Y11	O43190	866	GALGRAVLRSPGMTVAE	Homo sapiens
1517	6853	Purinergic Receptor P2Y11	O43190	867	MRVLNVDAARRRWSTRC	Homo sapiens
1518	6853	Purinergic Receptor P2Y11	O43190	868	CPGYRDSWNPEDAKSTGQA	Homo sapiens
1519	6853	Purinergic Receptor P2Y11	O43190	2299	CPANFLAAADDKLSGFQGD	Homo sapiens
1520	6853	Purinergic Receptor P2Y11	O43190	2300	ASNGLALYRFSIRKQR	Homo sapiens
1521	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	137	CNRSSTRHHEQPETSN	Homo sapiens
1522	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	139	PNQIRIRIMAAAKPKHD	Homo sapiens
1523	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	140	EKRLRVHAHSTIDSAR	Homo sapiens
1524	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	141	VQRPLLFASRRQSSARTEK	Homo sapiens
1525	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	142	QSEAEPSKSKSLSLESLEP	Homo sapiens
1526	7221	Galanin Receptor GalR2	AAC39634.1	197	NLTVCHPAWSAPRRRAMID	Homo sapiens
1527	7221	Galanin Receptor GalR2	AAC39634.1	198	RAVDPVAAAGSGARRAKRK	Homo sapiens
1528	7221	Galanin Receptor GalR2	AAC39634.1	199	GRAPGRASGRVCAAARG	Homo sapiens
1529	7221	Galanin Receptor GalR2	AAC39634.1	200	ERESDILLHMSEAAAGALRPC	Homo sapiens
1530	7246	Orexin Receptor 1	AAC39601.1	235	DQLGDLEQGLSGEPQP	Homo sapiens
1531	7246	Orexin Receptor 1	AAC39601.1	236	EPSATPGAGMGVPPGSR	Homo sapiens

1532	7246	Orexin Receptor 1	AAC39601.1	237	KRPDQLGLDLEQLSGEPQ	Homo sapiens
1533	7246	Orexin Receptor 1	AAC39601.1	239	KAPSPRSSASHKSLSLQSRC	Homo sapiens
1534	7247	Orexin Receptor 2	AAC39602.1	240	SELNETQEPFLNPTDYDDEE	Homo sapiens
1535	7247	Orexin Receptor 2	AAC39602.1	241	KWKPLQPVSQPRGPGQ	Homo sapiens
1536	7247	Orexin Receptor 2	AAC39602.1	242	TKSRMSAVAAEIKQIRA	Homo sapiens
1537	7247	Orexin Receptor 2	AAC39602.1	243	RQEDRLTRGRSTSTSRKS	Homo sapiens
1538	8436	Platelet-Activating Factor Receptor	P25105	1097	AVTRPIKTAQANTRKR	Homo sapiens
1539	8436	Platelet-Activating Factor Receptor	P25105	1098	DSTNTVPDSAGSGNVTRC	Homo sapiens
1540	8436	Platelet-Activating Factor Receptor	P25105	1099	QQRNAEVKRRALWMVC	Homo sapiens
1541	8436	Platelet-Activating Factor Receptor	P25105	1100	KKFRKHLTEKFYSMRSSRKC	Homo sapiens
1542	8509	G Protein-Coupled Receptor Ls8509	Q14439	398	DRYYSVLYPLERKISDAKSR	Homo sapiens
1543	8509	G Protein-Coupled Receptor Ls8509	Q14439	400	DEESEAKYIGSADFQAKE	Homo sapiens
1544	8509	G Protein-Coupled Receptor Ls8509	Q14439	401	ETRNSKKRLLPPLGNTPEE	Homo sapiens
1545	8509	G Protein-Coupled Receptor Ls8509	Q14439	402	ELQTKVKPKVGRVERKMSR	Homo sapiens
1546	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1078	KKQRKAGNFTSILIAN	Homo sapiens
1547	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1079	FRNLSLPTDLYTHQVAC	Homo sapiens
1548	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1080	CVENWPSKKDRLLFT	Homo sapiens
1549	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1081	CLRRRNAKVDKKKENEGR	Homo sapiens
1550	9421	Neuropeptide Y Receptor Type 1	P25929	1064	DEPFQNVTLDAYKDKVVC	Homo sapiens
1551	9421	Neuropeptide Y Receptor Type 1	P25929	1065	CYFKIYIRLKRNNNMMDK	Homo sapiens
1552	9421	Neuropeptide Y Receptor Type 1	P25929	1066	CDFRSRDDDYETIAMS	Homo sapiens
1553	9421	Neuropeptide Y Receptor Type 1	P25929	1498	ENDDCHLPLAMIFTLALA	Homo sapiens
1554	9421	Neuropeptide Y Receptor Type 1	P25929	2291	SNFSEKNAQLLAFENDDC	Homo sapiens

1555	9834	Type 1 Corticotropin releasing factor Receptor 1	NP_004373.1	1778	CESLSASNISDNGYRE	Homo sapiens
1556	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	1779	CQEILNEEKSKVHYHVA	Homo sapiens
1557	10457	Frizzled-2	NP_001457.1	1774	NHSEDGAPALLTAPP	Homo sapiens
1558	10457	Frizzled-2	NP_001457.1	1775	GGAPPRYATLEHPFHC	Homo sapiens
1559	10457	Frizzled-2	NP_001457.1	1776	CEPARPDGSMFFSQEE	Homo sapiens
1560	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1082	AAREAGAAVRRPLGPE	Homo sapiens
1561	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1083	LYRRPPREKIGRRRA	Homo sapiens
1562	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1085	PRELAAGQSFHGCLYR	Homo sapiens
1563	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1086	CKTVRLSDVRVRPVNTYAR	Homo sapiens
1564	14198	Interleukin-8 Receptor B	P25025	802	EDFWKGEDLSNYSYS	Homo sapiens
1565	14198	Interleukin-8 Receptor B	P25025	803	PPFLDAAAPCEPESLE	Homo sapiens
1566	14198	Interleukin-8 Receptor B	P25025	804	RRTVSSNVSPACYE	Homo sapiens
1567	14198	Interleukin-8 Receptor B	P25025	805	SKDSLPKDSRPSFVGS	Homo sapiens
1568	14641	Calcitonin Receptor	P30988	766	PKPLYVVGRRKMMMDAQYKC	Homo sapiens
1569	14641	Calcitonin Receptor	P30988	769	VEVVPNGELVRRDPVSC	Homo sapiens
1570	14641	Calcitonin Receptor	P30988	771	KIQWNQIRWGRRPSNRS	Homo sapiens
1571	14641	Calcitonin Receptor	P30988	772	CHQEPNRPANINQGEESAE	Homo sapiens
1572	16041	C-C Chemokine Receptor 6	P51684	355	TKSFLRSRTLPRSKIIC	Homo sapiens
1573	16041	C-C Chemokine Receptor 6	P51684	356	STFVFNQKYNTQGSDVCE	Homo sapiens
1574	16041	C-C Chemokine Receptor 6	P51684	357	TAANLGKMNRSQSE	Homo sapiens
1575	16041	C-C Chemokine Receptor 6	P51684	358	RYSENISRQTSETADNDNAS	Homo sapiens
1576	16599	Smoothed	NP_005622.1	2595	CPLAPPELHPPAPAP	Homo sapiens
1577	16599	Smoothed	NP_005622.1	2666	CAIVERERGWPDFLR	Homo sapiens
1578	16599	Smoothed	NP_005622.1	2667	CTNEVQNIKFNSGGQ	Homo sapiens
1579	16599	Smoothed	NP_005622.1	2668	CEVPLVRTDNPKSWE	Homo sapiens
1580	16599	Smoothed	NP_005622.1	2669	CRADGTMRLGEPTSNE	Homo sapiens

1581	16599	Smoothed	NP_005622.1	2670	EAEISPELQKRLGRKK	Homo sapiens
1582	16599	Smoothed	NP_005622.1	2671	ANVTIGLPTKQIPDC	Homo sapiens
1583	17250	G Protein-Coupled Receptor GPR45	O43898	1227	SNASDSGSTQLPAPLR	Homo sapiens
1584	17250	G Protein-Coupled Receptor GPR45	O43898	1228	CVLGYTELPADRAYVV	Homo sapiens
1585	17250	G Protein-Coupled Receptor GPR45	O43898	1249	LNTVRKNVVRVHNQSD	Homo sapiens
1586	17250	G Protein-Coupled Receptor GPR45	O43898	1272	KVPERIRRRIQPSTVYC	Homo sapiens
1587	17250	G Protein-Coupled Receptor GPR45	O43898	1273	DSLDRQLTRAGLRRL	Homo sapiens
1588	17345	G Protein-Coupled Receptor D6	LR13	363	EDADAENSSFYYDYLDE	Homo sapiens
1589	17345	G Protein-Coupled Receptor D6	LR13	364	DKYLEIVHAQPYHRLTR	Homo sapiens
1590	17345	G Protein-Coupled Receptor D6	LR13	365	CVLVRLRPAGQGGRALK	Homo sapiens
1591	17345	G Protein-Coupled Receptor D6	LR13	366	DLGERQSENYPNKEDVGNK	Homo sapiens
1592	17535	Gaba(b) Receptor 1	O95375	188	EKLTKRLKRHPEETGGFQEA	Homo sapiens
1593	17535	Gaba(b) Receptor 1	O95375	189	KKEEKKEWRKTLEPWK	Homo sapiens
1594	17535	Gaba(b) Receptor 1	O95375	190	DPLHRTIETFAKEEKEDID	Homo sapiens
1595	17535	Gaba(b) Receptor 1	O95375	191	YEIEYVCRGEREVGPKVRK	Homo sapiens
1596	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1205	SLWETVQKWREYRRQC	Homo sapiens
1597	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1206	LQKDNSSLPWRDLSEC	Homo sapiens
1598	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1208	CIVVSKLKANLMCKTD	Homo sapiens
1599	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1209	RWRLEHLHIQRDSSMKPLKC	Homo sapiens
1600	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1520	CQVDETEEPDVHLPQP	Homo sapiens
1601	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1521	REGLEAAGAAGASAAASYSS	Homo sapiens
1602	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1522	KLPSARAKIRITSSPI	Homo sapiens
1603	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1523	ESKSSIKRVLAITTVLS	Homo sapiens

1604	18471	Receptor LOC51210 G Protein-Coupled	NP_057456.1	1524	QGTLEILYPDAHLSAED	Homo sapiens
1605	18471	Receptor LOC51210 G Protein-Coupled	NP_057456.1	1525	PKTPLKERISLPSRRS	Homo sapiens
1606	19072	Receptor LOC51210 G Protein-Coupled	ENSP00000164265	2030	SVVQLRRQRDPDFEWNEGLC	Homo sapiens
1607	19072	Receptor Ls19072 G Protein-Coupled	ENSP00000164265	2032	PAVGWHDTSERFYTHGC	Homo sapiens
1608	19072	Receptor Ls19072 G Protein-Coupled	ENSP00000164265	2047	AVQVGRQADRRRAFTVPT	Homo sapiens
1609	19501	Receptor Ls19072 G Protein-Coupled	Q9UIZ3	1513	EHEPAGEEALRQKRAVATK	Homo sapiens
1610	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1514	ALRQKRAVATKSPTAE	Homo sapiens
1611	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1515	CEKEVLSSNVSWRYEEQQLE	Homo sapiens
1612	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1518	RLANNTGGWDSSGCWEEGD	Homo sapiens
1613	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1519	CKQEKSSLFQISKSIG	Homo sapiens
1614	21632	Receptor KIAA0758 G Protein-Coupled	BAA96055.1	2164	CTAFQRREGGVPGTRPGSPG	Homo sapiens
1615	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2166	APGTRASRRCDRAGRWE	Homo sapiens
1616	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2167	CPAERVANNRGDFRWPR	Homo sapiens
1617	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2171	QNPPEPEPPADGQLRFRC	Homo sapiens
1618	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2175	VPLGGGAPGTRASRRC	Homo sapiens
1619	22315	Receptor Ls21632 G Protein-Coupled	LR29	425	PAARVHRPSRCRYRD	Homo sapiens
1620	22315	Receptor GPR92/GPR93 G Protein-Coupled	LR29	426	TLARPDATQSQRRRKTVRL	Homo sapiens
1621	22315	Receptor GPR92/GPR93 G Protein-Coupled	LR29	427	RSKLVAAASVPARDVRG	Homo sapiens
1622	22315	Receptor GPR92/GPR93 G Protein-Coupled	LR29	428	AGSERSAVTTDATRPD	Homo sapiens

1623	22925	Latrophilin-3	O94867	1138	CSGKSTESSIGSGKTSGR	Homo sapiens
1624	22925	Latrophilin-3	O94867	1140	ENHQPHHYTRRRIPQD	Homo sapiens
1625	22925	Latrophilin-3	O94867	1141	ESVTSTQTEPPPAKC	Homo sapiens
1626	22925	Latrophilin-3	O94867	1497	SSASLNREGLLNARD	Homo sapiens
1627	25359	G Protein-Coupled Receptor GPR34	O95853	1255	DRYIKINRSIQQRKAIT	Homo sapiens
1628	25359	G Protein-Coupled Receptor GPR34	O95853	1257	CFHYRDKHNAKGEAIFN	Homo sapiens
1629	25359	G Protein-Coupled Receptor GPR34	O95853	1258	RISKRRSKFPNSGKYA	Homo sapiens
1630	25359	G Protein-Coupled Receptor GPR34	O95853	1259	CQLLFRRFQGEPSRSESTSE	Homo sapiens
1631	30698	G Protein-Coupled Receptor GPR34	CAC27252.1	2721	RLQEILTFEIKINIKTR	Homo sapiens
1632	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2722	KGKSRAAENASLGPTN	Homo sapiens
1633	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2723	LLFGTIMDHKIRDALR	Homo sapiens
1634	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2724	RPSIGSSKSDVVIIMRI	Homo sapiens
1635	30875	G Protein-Coupled Receptor Ls30698	NP_076404.1	1579	KLPNNELHGQESHNSGN	Homo sapiens
1636	30875	Receptor GPR87/GPR95	NP_076404.1	1580	SGNRSDGPGKNTLHNEFD	Homo sapiens
1637	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1581	RQFISQSSRKRKHNQISIR	Homo sapiens
1638	30875	Receptor GPR87/GPR95	NP_076404.1	1582	SHLDRLDESAQKILYYC	Homo sapiens
1639	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1584	CRSFSRRLFKKSNIRTRSE	Homo sapiens
1640	30875	Receptor GPR87/GPR95	NP_076404.1	1585	ESIRSLQSVRRSEVRYYD	Homo sapiens
1641	31568	G Protein-Coupled Receptor GPR87/GPR95	O75963	331	CRKELSNLITEEGEGGGV	Homo sapiens
1642	31568	Receptor RE2	O75963	332	EEDAQRTGRKNSSTSTSS	Homo sapiens
1643	31568	G Protein-Coupled Receptor RE2	O75963	333	CFGDRYVREPFVQRQRTSR	Homo sapiens
1644	31568	G Protein-Coupled Receptor RE2	O75963	334	HSSSTGDTGFSCSQDSGNL	Homo sapiens

1645	36534	Receptor RE2	O75473	1232	CQKLQKIDLRHNEIYKVD	Homo sapiens
1646	36534	G Protein-Coupled Receptor GPR49	O75473	1233	NKGDNSSMDDLHKDA	Homo sapiens
1647	36534	G Protein-Coupled Receptor GPR49	O75473	1234	QDERDLEDFLLDFFED	Homo sapiens
1648	36534	G Protein-Coupled Receptor GPR49	O75473	1235	ERGFVKYSAKFETKA	Homo sapiens
1649	36534	G Protein-Coupled Receptor GPR49	O75473	1236	RSKHPSLMSINSDDVEKQSC	Homo sapiens
1650	37498	Receptor GPR49	NP_004727.1	2597	DAQESTGVTLRQRR	Homo sapiens
1651	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2600	CKKINQLISETEAVVTN	Homo sapiens
1652	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2610	ADDQTLLEQMMMDQDDG	Homo sapiens
1653	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2672	KYNQSLRLRPRLASQ	Homo sapiens
1654	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2673	KRYFAKFEKFFQTC	Homo sapiens
1655	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2674	DGDRQKAMKRLRVPL	Homo sapiens
1656	40881	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	CAC28410.1	2103	RVRSGRVRYSYTRDFQDC	Homo sapiens
1657	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2105	CNNSVPGKEHPFDITVMIRE	Homo sapiens
1658	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2106	APSKPGLPKQATVPRKVD	Homo sapiens
1659	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2135	AASKPKSTPAVIQGPSKGD	Homo sapiens
1660	42697	Lung Seven Transmembrane Receptor 2 (LUSTR2)	O00406	1261	KRSELNKTQLTSETYFIMC	Homo sapiens
1661	42697	G Protein-Coupled Receptor GPR64	O00406	1262	GMASTERNGVSFSVQNGDVC	Homo sapiens
1662	42697	G Protein-Coupled Receptor GPR64	O00406	1263	CRICKKKQLGAGRKTSIQD	Homo sapiens
1663	42697	G Protein-Coupled Receptor GPR64	O00406	1264	DFTGKQHMFKNEKEDSC	Homo sapiens



1664	45937	KIAA1624 Protein	AAK57695	2072	PNVNPASAGNQTKTQD	Homo sapiens
1665	45937	KIAA1624 Protein	AAK57695	2073	RVKSPPEAGTQLPKIIFS	Homo sapiens
1666	45937	KIAA1624 Protein	AAK57695	2074	KDGYMVMVNVSSLNPEP	Homo sapiens
1667	45937	KIAA1624 Protein	AAK57695	2076	RSTVDSKAMGEKSFVHNG	Homo sapiens
1668	50847	Neurotensin Receptor type 2	O95665	1265	CQPLRARSLTIPRTR	Homo sapiens
1669	50847	Neurotensin Receptor type 2	O95665	1266	GQKHELETADGEPEPASRVC	Homo sapiens
1670	50847	Neurotensin Receptor type 2	O95665	1267	KKTFIQGGQVSLVRHKD	Homo sapiens
1671	50847	Neurotensin Receptor type 2	O95665	1269	CGEHHPMKRLPPKPQSP	Homo sapiens
1672	50847	Neurotensin Receptor type 2	O95665	2294	STSTPGSSTPSRLELLSEE	Homo sapiens
1673	50847	Neurotensin Receptor type 2	O95665	2301	METSSPRPPRPSSNPG	Homo sapiens
1674	50847	Neurotensin Receptor type 2	O95665	2302	CSQVPSTPGSSTPSR	Homo sapiens
1675	53440	G Protein-Coupled Receptor LS53440	LR76	1850	DPNGNESSATYFLIG	Homo sapiens
1676	53440	G Protein-Coupled Receptor LS53440	LR76	1851	RHATVLTLPRTKIGV	Homo sapiens
1677	53440	G Protein-Coupled Receptor LS53440	LR76	1852	ILKTVLGLTREAGAKA	Homo sapiens
1678	53440	G Protein-Coupled Receptor LS53440	LR76	1853	HRFSKRDRDSPLPVILAN	Homo sapiens
1679	53440	G Protein-Coupled Receptor LS53440	LR76	1854	KEIRQRILRLFHVATHASE	Homo sapiens
1680	54053	Gaba(b) Receptor 2	O75899	1416	GEDIEISDTESFSNDPC	Homo sapiens
1681	54053	Gaba(b) Receptor 2	O75899	1417	SSKQIKTISGKTPQQYE	Homo sapiens
1682	54053	Gaba(b) Receptor 2	O75899	1419	AATGNRRRFQFTGNQKKE	Homo sapiens
1683	54053	Gaba(b) Receptor 2	O75899	1420	CKDPIEDINSPEHIQRR	Homo sapiens
1684	55728	ETL protein	NP_071442.1	2113	CVLSRKIQEEYVRLFKNP	Homo sapiens
1685	55728	ETL protein	NP_071442.1	2114	CIAANINKTLKIRSIKEP	Homo sapiens
1686	55728	ETL protein	NP_071442.1	2115	KLSVNHRRTHLTCLMHTVE	Homo sapiens
1687	55728	ETL protein	NP_071442.1	2116	EKITFLSHRKVTDYRSLC	Homo sapiens
1688	55728	ETL protein	NP_071442.1	2117	SSSLGYKNNTISAKD	Homo sapiens
1689	56923	Muscarinic acetylcholine	P20309	1421	CSSYELQQQSMKRSNRRK	Homo sapiens

1690	56923	Receptor M3 Muscarinic acetylcholine Receptor M3	P20309	1422	KPSSEQMIDQDHSSSDSWNNN	Homo sapiens
1691	56923	Muscarinic acetylcholine Receptor M3	P20309	1423	DLERKADKLQAQKSVD	Homo sapiens
1692	56923	Muscarinic acetylcholine Receptor M3	P20309	1424	KEATLAKRFALKTRSQ	Homo sapiens
1693	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2097	PPTCRPRRMSVCYRPPGNE	Homo sapiens
1694	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2098	CLAVTRPFLAPRLRSPALAR	Homo sapiens
1695	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2099	RGARWGSGRHGARVGR	Homo sapiens
1696	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2100	TAGDLLPRAGPRFLTR	Homo sapiens
1697	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2101	EGSGEARGGGRSREGTME	Homo sapiens
1698	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2102	RTPQLKVVGGGRGNGD	Homo sapiens
1699	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1909	RSAPTALSRRLRARTHLPGC	Homo sapiens
1700	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1910	VRGSHGEPDASLMIPRSC	Homo sapiens
1701	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1911	RKEDSVLMEATSGGPTSR	Homo sapiens
1702	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1912	DQNKADIGGMLPGLTVRSV	Homo sapiens
1703	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1913	PAGWPDQSLAESDSEDPG	Homo sapiens
1704	74514	5-HT5A Receptor	NP_076917.1	2118	ETNHLGKDDLRPSP	Homo sapiens
1705	74514	5-HT5A Receptor	NP_076917.1	2119	SLVHELSGRRWQLGRLRC	Homo sapiens
1706	74514	5-HT5A Receptor	NP_076917.1	2120	LLFGWGETYSEGSEEC	Homo sapiens
1707	74514	5-HT5A Receptor	NP_076917.1	2121	FRVGSRTKINSVSPISE	Homo sapiens
1708	74514	5-HT5A Receptor	NP_076917.1	2122	RHATVTFQPEGDTWREQK	Homo sapiens

1709	81765	Thromboxane A2 Receptor	P21731	1277	GITRPFSPAVASQRR	Homo sapiens
1710	81765	Thromboxane A2 Receptor	P21731	1278	CHVYHGQEAQQRPDRSEVE	Homo sapiens
1711	81765	Thromboxane A2 Receptor	P21731	1279	RNPPAMSPAGQLSRTE	Homo sapiens
1712	81765	Thromboxane A2 Receptor	P21731	1280	RRLQPRLSTRPRRVSLC	Homo sapiens
1713	98519	Chemokine (C motif) XC	AAA62837.1	155	RYLSVVSPLTLRVPTLRC	Homo sapiens
1714	98519	Receptor 1 (CCXCR1)	AAA62837.1	156	SSILDTFHKVLSSGCDYSE	Homo sapiens
1715	98519	Chemokine (C motif) XC	AAA62837.1	157	VEILRTLFRSRKRRHRTVK	Homo sapiens
1716	98519	Chemokine (C motif) XC	AAA62837.1	158	QTLFRTQIIRSCAEAKQGLE	Homo sapiens
1717	98519	Receptor 1 (CCXCR1)	AAA62837.1	159	RLQAPSPASIPHSPGAFAYE	Homo sapiens
1718	130108	Chemokine (C motif) XC	AAA62837.1	1589	RIEPPYSIVNSSPSQEE	Homo sapiens
1719	130108	Receptor 1 (CCXCR1)	NP_006785.1	1590	IMIAQTLRKNAQVRKC	Homo sapiens
1720	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1591	RNQNYNKLQHVQTRGYTKS	Homo sapiens
1721	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1592	SRLQLVSAINLSTAKD	Homo sapiens
1722	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1593	CKQKTRLRAMGKGNLEVNIR	Homo sapiens
1723	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1594	NSAYMLSPKPKKFFVDQAC	Homo sapiens
1724	133117	G Protein-Coupled Receptor GPR75	AAC98506.1	1218	CKVQDSNRRKMLPTQF	Homo sapiens
1725	133117	Receptor RAIG1	AAC98506.1	1219	HAVSLTKLVRGRKPLS	Homo sapiens
1726	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1220	NVNVFELSAPRRNED	Homo sapiens
1727	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1221	TKQRNPMIDYPVEDAFC	Homo sapiens
1728	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1222	CKPQLVKKSYGVENRA	Homo sapiens
1729	152198	Tachykinin Receptor 2	AAB05897.1	1286	RRVVPGHQAHAHANLRH	Homo sapiens
1730	152198	Tachykinin Receptor 2	AAB05897.1	1287	KEDKLELTPITSLTRVNR	Homo sapiens
1731	152198	Tachykinin Receptor 2	AAB05897.1	1288	KETLFMAGDTAPSEATSGEA	Homo sapiens

1732	152198	Tachykinin Receptor 2	AAB05897.1	1290	CVAVWPEDSGGKTLL	Homo sapiens
1733	152201	Thyrotropin Receptor	P16473	1445	RQKRSVNALNSPLHQE	Homo sapiens
1734	152201	Thyrotropin Receptor	P16473	1446	KFQDTHNNAHYVFFEEQED	Homo sapiens
1735	152201	Thyrotropin Receptor	P16473	1449	CHVKIYIVRNPNQYNGDK	Homo sapiens
1736	152201	Thyrotropin Receptor	P16473	1450	CKRQAQAYRGQRVPPKNSTD	Homo sapiens
1737	152245	C-C Chemokine Receptor 2	NP_000639.1	1896	SRSRFRNTNESGEEVT	Homo sapiens
1738	152245	C-C Chemokine Receptor 2	NP_000639.1	1898	CQKEDSVVCGPYFPRGWNIN	Homo sapiens
1739	152245	C-C Chemokine Receptor 2	NP_000639.1	1899	SGEETTFDFDYDYGAPCHKF	Homo sapiens
1740	152299	Interleukin-8 Receptor A	P25024	806	DFDDLFTGMPPADEDYSPC	Homo sapiens
1741	152299	Interleukin-8 Receptor A	P25024	807	CWGLSMNLSLPFLFRQAYH	Homo sapiens
1742	152299	Interleukin-8 Receptor A	P25024	808	RHRVTSYTSSVNVSSN	Homo sapiens
1743	152299	Interleukin-8 Receptor A	P25024	1490	CMLETETLNKYVVIAYALV	Homo sapiens
1744	158822	Mas Proto-Oncogene	NP_002368.1	1527	EEPTNISTGRNASVGNHRQ	Homo sapiens
1745	158822	Mas Proto-Oncogene	NP_002368.1	1528	RRNPFVWTHLSIAD	Homo sapiens
1746	158822	Mas Proto-Oncogene	NP_002368.1	1529	VVMCIDREESHRSRNDICRAV	Homo sapiens
1747	158822	Mas Proto-Oncogene	NP_002368.1	1530	SSTILVVKIRKNTWASHSSK	Homo sapiens
1748	158822	Mas Proto-Oncogene	NP_002368.1	1531	TRAFKDEMQPRRQKDNC	Homo sapiens
1749	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1578	ERYLGVAFPVQYKLSRPL	Homo sapiens
1750	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1586	QYLNITEQVRSNEITC	Homo sapiens
1751	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1588	EGTNEDRGVGGQEGMPSSD	Homo sapiens
1752	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1616	RGLQVLRNQGSLLGRRGKD	Homo sapiens
1753	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1292	KQCLEEAQLENETIGCS	Homo sapiens
1754	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1296	KDLALFDSGESDQCSE	Homo sapiens
1755	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1297	LQKLPPDIRKSDSSP	Homo sapiens
1756	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1298	NPKYRHPGGSGNGATC	Homo sapiens
1757	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1299	KVFSNFYSKAGNISKNC	Homo sapiens
1758	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1301	CGYSDPEDESKITFY	Homo sapiens
1759	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1305	KRKWRSPRCPTPSASRD	Homo sapiens

1760	160040	Polypeptide Receptor 2 Vasoactive Intestinal	P41587	1306	CGSSFSRNGSEGALQFHR	Homo sapiens
1761	160055	Polypeptide Receptor 2 Motilin Receptor (GPR38)	AAC26081.1	132	REPPWPALPPCDERRCS	Homo sapiens
1762	160055	Motilin Receptor (GPR38)	AAC26081.1	134	SPSPGPETAEEAAALFSREC	Homo sapiens
1763	160055	Motilin Receptor (GPR38)	AAC26081.1	135	SSRRPLRGPAASGRERGHRC	Homo sapiens
1764	160055	Motilin Receptor (GPR38)	AAC26081.1	136	RKSRPRGFHRSRDITAG	Homo sapiens
1765	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1595	NPLVTGYLGRGPGTKTVC	Homo sapiens
1766	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1596	GRYLGAAPFLGYQAFRRPC	Homo sapiens
1767	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1597	CLEAWDPASAGPARFS	Homo sapiens
1768	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1598	CLRALARSGLTHRRKLR	Homo sapiens
1769	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1599	NASNVASFLYPNLGGSWRK	Homo sapiens
1770	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1617	TVSLPIKAVEALASGA	Homo sapiens
1771	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1618	DHSNTSLGINTPVNGSPVC	Homo sapiens
1772	160189	G Protein-Coupled Receptor GPR54	BAB55446	1926	CSEAFPSRALERAFALY	Homo sapiens
1773	160189	G Protein-Coupled Receptor GPR54	BAB55446	1927	ERAGAVRAKVSRILVAAVV	Homo sapiens
1774	160189	G Protein-Coupled Receptor GPR54	BAB55446	1928	RRPGSPDPAAPHAEHLRLGS	Homo sapiens
1775	160189	G Protein-Coupled Receptor GPR54	BAB55446	1929	GAPANASGCGCGGANASD	Homo sapiens
1776	160202	Adrenomedullin Receptor (ADMR)	O15218	390	DLFNHTLSECHVELSQST	Homo sapiens
1777	160202	Adrenomedullin Receptor (ADMR)	O15218	391	NVLIACRLRQPGQPKSRRHC	Homo sapiens
1778	160202	Adrenomedullin Receptor (ADMR)	O15218	392	KDQTKAGTCASSSCSTQ	Homo sapiens
1779	160202	Adrenomedullin Receptor (ADMR)	O15218	484	KGDSQPAAAAAPHPEPSLS	Homo sapiens
1780	160204	G Protein-Coupled Receptor RTA	LR85	1977	CRARRRQRSTKLNHVILA	Homo sapiens

1781	160204	G Protein-Coupled Receptor RTA	LR85	1983	CPGLSEAPELYRRGFLTIEQ	Homo sapiens
1782	160204	G Protein-Coupled Receptor RTA	LR85	1985	RDGAELGEAGGSTPNVT	Homo sapiens
1783	160204	G Protein-Coupled Receptor RTA	LR85	2173	LAGRDKSQRLWEPLRV	Homo sapiens
1784	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1678	RTTRKWNWGCTHCYLAFNSD	Homo sapiens
1785	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1679	RAKLLREGWVHANRPKR	Homo sapiens
1786	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1680	RRVMILKEIYHPRMLLI	Homo sapiens
1787	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1682	SALARAFGEEEFSSC	Homo sapiens
1788	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1683	RSCSRKMNSSGGCLSEE	Homo sapiens
1789	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	151	PGPDRDATCNSRQAALAVSK	Homo sapiens
1790	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	152	SSHAAVSLRLQHRGRRRPGR	Homo sapiens
1791	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	153	DDSELGGAGSSRRRRTSSTA	Homo sapiens
1792	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	154	DGPPEPGAEEQHLELEPGPRR	Homo sapiens
1793	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2220	CPILEQMSRLQSHSNTSIRY	Homo sapiens
1794	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2221	RYIDHAAVLLHGLASLLGLV	Homo sapiens
1795	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2222	CRMRTQTVTTWVHLALSDL	Homo sapiens
1796	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2223	SASLPFFTYFLAVGHSWE	Homo sapiens
1797	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2224	CLVLWALAVLNTVPYFVFRD	Homo sapiens
1798	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2225	CYNNVLLNPGPDRDAT	Homo sapiens
1799	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2226	CNSRQAALAVSKFLAFLVP	Homo sapiens
1800	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2228	RGLPFTVTSIAFFNSVANPVL	Homo sapiens

1801	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2229	CSRPEEPRGPARLLGWLLGS	Homo sapiens
1802	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2230	CAASPQTGPLNRLSS	Homo sapiens
1803	160212	Receptor GPR44 (CRTH2) G Protein-Coupled	Q9Y2T5	444	KEINDRRARFSPSHEVDSSRE	Homo sapiens
1804	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	445	CVKDQEAQEPKPRKRANS	Homo sapiens
1805	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	446	RWTEWRILNMSSGIVNASER	Homo sapiens
1806	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	622	HSCPLGFGHYSVVDVCIFE	Homo sapiens
1807	160217	Receptor GPR52 G Protein-Coupled	AAD22410.1	161	GKVEKVMCFHNMSDDTWSAK	Homo sapiens
1808	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	162	RSIHILLGRRDHTQDWVQK	Homo sapiens
1809	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	163	CRAKQSIFFLLQLSM	Homo sapiens
1810	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	164	KEFRMNIRAHPRSRVQLVLQ	Homo sapiens
1811	160219	Receptor GPR55 G Protein-Coupled	AAC52028.1	2	AQRPPTDVGQAEATRKAAR	Homo sapiens
1812	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	3	KEFQEASALAVAPRAKAHK	Homo sapiens
1813	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	123	GGFCFRSTRHNFNSMR	Homo sapiens
1814	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	125	ETIRRALYITSKLSDANC	Homo sapiens
1815	160221	Receptor GPR35 G Protein-Coupled	LR6	335	FPPVLDGGGDEDEAPCALEQ	Homo sapiens
1816	160221	Receptor GPR27 G Protein-Coupled	LR6	338	RGARRLLVLEEFKTEKRLC	Homo sapiens
1817	160221	Receptor GPR27 G Protein-Coupled	LR6	496	NASEPGSGGGGEEAALGLK	Homo sapiens
1818	160221	Receptor GPR27 G Protein-Coupled	O54897	515	GLRALACLPVAVMLAARRA	Mus musculus
1819	160221	Receptor GPR27 G Protein-Coupled	LR6	1291	RPAGPGRGARILLVLE	Homo sapiens

1820	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1606	CQRPPKQEDGQSPV	Homo sapiens
1821	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1607	CNMIGDVTTEQYFALRRK	Homo sapiens
1822	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1610	EGRADEQSAEAAALVP	Homo sapiens
1823	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1611	QNFVGRRRYGAEQNPTVK	Homo sapiens
1824	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1600	RIFRSIKQSMGLSAAQKAK	Homo sapiens
1825	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1601	CDRFVAVVALESRRR	Homo sapiens
1826	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1604	ATDHSRQEVSRHKGWKE	Homo sapiens
1827	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1605	KTDVTRLTHSRDTEELQS	Homo sapiens
1828	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	403	ETQEQQSRSKRGTEDEAK	Homo sapiens
1829	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	404	SPNPDKDGGTDPDSGQELR	Homo sapiens
1830	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	405	CQLVTWRVRGPPGRKSE	Homo sapiens
1831	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	406	AANGSDNKLKTEVSS	Homo sapiens
1832	160225	Sphingolipid Receptor Edg6	CAA04118.1	70	PRDSFRGSRSLFRMIRE	Homo sapiens
1833	160225	Sphingolipid Receptor Edg6	CAA04118.1	71	ERFATMVRPVAESGATKTSR	Homo sapiens
1834	160225	Sphingolipid Receptor Edg6	CAA04118.1	72	RLVQASGGQKAPRPAAR	Homo sapiens
1835	160225	Sphingolipid Receptor Edg6	CAA04118.1	73	RAVEAHSGASTDSSLRPRD	Homo sapiens
1836	160225	Sphingolipid Receptor Edg6	CAA04118.1	1914	IFRLVQASGGQKAPRPAAR	Homo sapiens
1837	160225	Sphingolipid Receptor Edg6	CAA04118.1	1915	DSSLRPRDSFRGSRSLFRM	Homo sapiens
1838	160225	Sphingolipid Receptor Edg6	CAA04118.1	1916	RSLSFRMIREPLSSISVR	Homo sapiens
1839	160225	Sphingolipid Receptor Edg6	CAA04118.1	1917	GPEDGGGLGALRGLSVAAAC	Homo sapiens
1840	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1625	ANIGSLCVSFLQPKKE	Homo sapiens
1841	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1626	ETIFNAVMLWEDEVVE	Homo sapiens
1842	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1627	CNRKVVQAVRHNKATENKE	Homo sapiens



1843	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1628	CILEHAVNFEDHSNSGKR	Homo sapiens
1844	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1629	CNTSQQRKRILSVSTKD	Homo sapiens
1845	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	2303	CDAEKSNTFLCYDKYPLEK	Homo sapiens
1846	160300	Encephalopsin	NP_055137.1	2131	CTVDWKSNDANDSSFV	Homo sapiens
1847	160300	Encephalopsin	NP_055137.1	2132	CVEDLQTIQVILKLYEK	Homo sapiens
1848	160300	Encephalopsin	NP_055137.1	2133	CQRPADLPAAAGSEMQRIP	Homo sapiens
1849	160300	Encephalopsin	NP_055137.1	2134	TSDESLSVDDSDKTIG	Homo sapiens
1850	160312	Sphingolipid Receptor Edg5	O95136	1018	ERHVAIAKVKLYGSDKSC	Homo sapiens
1851	160312	Sphingolipid Receptor Edg5	O95136	1019	RSRDLRREVLRPLQC	Homo sapiens
1852	160312	Sphingolipid Receptor Edg5	O95136	1020	QEHYNYTKETLETQET	Homo sapiens
1853	160312	Sphingolipid Receptor Edg5	O95136	1021	GRRRVGTPGHHLLPLR	Homo sapiens
1854	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1922	MMRKKAKFSLRENVPVEETKG	Homo sapiens
1855	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1923	MMIEYSNFEKEYDDVTIKM	Homo sapiens
1856	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1924	CEQTEEEKKLLKRHLALFRSE	Homo sapiens
1857	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1925	KKRVGDGSGVLRTIHGKEMSK	Homo sapiens
1858	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	463	DRARRERFIMNEKWDNNSSE	Homo sapiens
1859	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	464	RKNQEQWHVVSRRKKQKIHK	Homo sapiens
1860	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	465	RKSAEKPQQELVMEELKE	Homo sapiens
1861	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	500	RQSAGDRRLGLSRQTAK	Homo sapiens
1862	160324	G Protein-Coupled Receptor	NP_076403.1	1619	DRFLKIIRPLRNIFLKKP	Homo sapiens
1863	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1620	MILSNKEATPSSVKKC	Homo sapiens
1864	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1622	VYDSYRKSCKDRKNN	Homo sapiens
1865	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1623	ARVPYTHSQTNNTKDC	Homo sapiens

1866	160324	G Protein-Coupled Receptor	NP_076403.1	1624	CMQGRKTTASSQENHSSQTD	Homo sapiens
1867	160329	GPR86/GPR94/P2Y13 Proteinase-Activated Receptor 4	O76067	1308	CANDSDTLELPDSSRA	Homo sapiens
1868	160329	Proteinase-Activated Receptor 4	O76067	1309	PLRARALRGRRLALGLC	Homo sapiens
1869	160329	Proteinase-Activated Receptor 4	O76067	1310	LQRQIFRLARSDRVLC	Homo sapiens
1870	160329	Proteinase-Activated Receptor 4	O76067	1311	RDKVRAGLFQRSPGDT	Homo sapiens
1871	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1213	CELKRDLLQLSQFLKHPQK	Homo sapiens
1872	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1214	TSVRFMGDMVVSFEEDR	Homo sapiens
1873	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1215	RQEEEQSEIMEYSVLLP	Homo sapiens
1874	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1216	RTLFQRTKGRSGEAEKR	Homo sapiens
1875	160387	Glucagon-Like Peptide 2 Receptor	O95838	1312	GSLLFETTRKWAAQYKQAC	Homo sapiens
1876	160387	Glucagon-Like Peptide 2 Receptor	O95838	1313	QTIENTADIWQDDSEC	Homo sapiens
1877	160387	Glucagon-Like Peptide 2 Receptor	O95838	1315	CPKKLSEGDGAELRK	Homo sapiens
1878	160387	Glucagon-Like Peptide 2 Receptor	O95838	1316	QQDHARWPRGSSLSEC	Homo sapiens
1879	160388	Latrophilin-1	O94910	1121	EPTSTHESEHQSGAWC	Homo sapiens
1880	160388	Latrophilin-1	O94910	1126	CEPREVRRVQWPATQQ	Homo sapiens
1881	160388	Latrophilin-1	O94910	1129	RSQDFPPGDGGPEPPR	Homo sapiens
1882	160388	Latrophilin-1	O94910	1131	CTAEDGATSRPLSSPPGRDS	Homo sapiens
1883	160388	Latrophilin-1	O94910	1706	RESAGKNYNKMKHRETC	Homo sapiens
1884	160388	Latrophilin-1	O94910	1707	RDSPSPDSSPEGPSEALP	Homo sapiens
1885	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1938	QVGPCRSLSRGRGSSGAC	Homo sapiens
1886	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1939	CRDAGTELTGHLVPHDGLR	Homo sapiens

1887	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1940	CKLAQAPGLRAGERSPEESL	Homo sapiens
1888	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1942	RVSDTPEGVNSLDP SHGES	Homo sapiens
1889	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1943	RSQKSGPSYIPFLREES	Homo sapiens
1890	160397	Latrophilin-2	O95490	1132	CEALDSKGIKWPQTQR	Homo sapiens
1891	160397	Latrophilin-2	O95490	1133	DILDAQLQLKPSKQD	Homo sapiens
1892	160397	Latrophilin-2	O95490	1136	RTHSLLYQPQKKVKSE	Homo sapiens
1893	160397	Latrophilin-2	O95490	1137	RDSPYPESPDM EEDL	Homo sapiens
1894	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1630	CQEQKMLRTLDLSYNIRD	Homo sapiens
1895	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1631	CDSYANLNTEDNSLQD	Homo sapiens
1896	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1632	KGTDAAANVTSTLENEE	Homo sapiens
1897	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1633	ERSLSAKDIMKNKGKSNHLK	Homo sapiens
1898	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1634	CNLEKEDLSENSQSSMIK	Homo sapiens
1899	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1635	KRRVTKKSGSVSVSIS	Homo sapiens
1900	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1636	CGTQSAHSDYADEEDS	Homo sapiens
1901	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1637	DEEDSFVSDSDQVQAC	Homo sapiens
1902	160435	LS160435 Receptor	LR80	1918	ATILKLRTEEAHGREQRR	Homo sapiens
1903	160435	LS160435 Receptor	LR80	1919	CRRVPRDITLDRRESLFSAR	Homo sapiens
1904	160435	LS160435 Receptor	LR80	1920	PLSSKRWRRRRYAVAAAC	Homo sapiens
1905	160435	LS160435 Receptor	LR80	1921	CRRMGPRSPSVIFMINL	Homo sapiens
1906	160889	Platelet Activating Receptor Homolog (H963)	O14626	1223	MMIPIKDIKEKSNVGC	Homo sapiens
1907	160889	Platelet Activating Receptor Homolog (H963)	O14626	1224	CLVIRGLYRNKDNENVP	Homo sapiens
1908	160889	Platelet Activating Receptor Homolog (H963)	O14626	1225	CSTRISLFKAKEATLL	Homo sapiens

1909	160889	Homolog (H963) Platelet Activating Receptor	O14626	1226	ETFASPKETKAQKEKLR	Homo sapiens
1910	161024	Homolog (H963) Protein A	NP_062832.1	1690	ESRAVGILPLGLSAGRRC	Homo sapiens
1911	161024	Protein A	NP_062832.1	1691	EDARGKRSSLDGSESAK	Homo sapiens
1912	161024	Protein A	NP_062832.1	1692	RTVWEQCVAIMSEEDGD	Homo sapiens
1913	161024	Protein A	NP_062832.1	1693	CKVRFDANGATGPGSRD	Homo sapiens
1914	161024	Protein A	NP_062832.1	1694	RRLSHDETNIFFPRE	Homo sapiens
1915	161024	Protein A	NP_062832.1	1695	GGPPEYLGQRHRLDEED	Homo sapiens
1916	161024	Protein A	NP_062832.1	1696	REEITFIDETPLPSP	Homo sapiens
1917	161024	Protein A	NP_062832.1	1697	RPRPLGLSPRRLSLGSPE	Homo sapiens
1918	161214	Galanin Receptor GalR3	AAC35944.1	202	RYGALELCVPAWEDARR	Homo sapiens
1919	161214	Galanin Receptor GalR3	AAC35944.1	203	GAAGAAEARRRATGRAGR	Homo sapiens
1920	161214	Galanin Receptor GalR3	AAC35944.1	204	ASRHFARFRRLWPC	Homo sapiens
1921	161214	Galanin Receptor GalR3	AAC35944.1	205	RARRALRRVRP ASSGPP	Homo sapiens
1922	161221	Urotensin-II Receptor (GPR14)	AAC35944.1 LR15	371	ERYAAVLRPLDTVQRPKG	Homo sapiens
1923	161221	Urotensin-II Receptor (GPR14)	LR15	372	RAYRRSQRASFKRARRPGAR	Homo sapiens
1924	161221	Urotensin-II Receptor (GPR14)	LR15	373	RNYRDHILGRVRGPGSG	Homo sapiens
1925	161221	Urotensin-II Receptor (GPR14)	LR15	374	RARFQRCSGRSLSCSPQPTD	Homo sapiens
1926	161249	G Protein-Coupled Receptor GPR66	LR20	394	ARGHFDPEDLNLIDEALRLK	Homo sapiens
1927	161249	G Protein-Coupled Receptor GPR66	LR20	395	IGLRLRRERLLMQEAKGRG	Homo sapiens
1928	161249	G Protein-Coupled Receptor GPR66	LR20	396	RGSAAARSRYTCRLQQH	Homo sapiens
1929	161249	G Protein-Coupled Receptor GPR66	LR20	397	ALCLGACCHRLRPRHSS	Homo sapiens
1930	161251	Purinergic Receptor P2Y10	O00398	859	CFLLKPFRRARDWKRRYD	Homo sapiens
1931	161251	Purinergic Receptor P2Y10	O00398	860	PFPILRSTDNLNNKSC	Homo sapiens
1932	161251	Purinergic Receptor P2Y10	O00398	862	QLSRHGSSVTRSLMSKE	Homo sapiens
1933	161251	Purinergic Receptor P2Y10	O00398	863	LRQPPMAFGGIGSERQK	Homo sapiens
1934	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1672	YYDDLDDVDVEESAPC	Equine herpesvirus 2

1935	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1674	CDPYPEMSTNVWRRRAHVAK	Equine herpesvirus 2
1936	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1675	CYVVIIRLLRRPSKK	Equine herpesvirus 2
1937	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1676	CKYIPFLSGDGEGKEGPT	Equine herpesvirus 2
1938	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1820	RNLTSAPTIASPPAPS	Homo sapiens
1939	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1821	PSWTPSPRPGPAHPFLQPP	Homo sapiens
1940	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1822	RSSHQKRGTRDVGSNVC	Homo sapiens
1941	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1823	KSTSTASFVSSSHMSVEE	Homo sapiens
1942	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1317	TSSPFLMAKPKDEKNITKC	Homo sapiens
1943	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1318	KKSMKKNLSHKKKAIG	Homo sapiens
1944	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1319	QRTIHLHLHNETKPC	Homo sapiens
1945	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1320	RKHSLSVTYVPRKKASLPE	Homo sapiens
1946	177191	Histamine H3 Receptor	Q9Y5N1	474	RAVSYRAQQGDTRRRAVRK	Homo sapiens
1947	177191	Histamine H3 Receptor	Q9Y5N1	475	QRRTLRLDGAREAAGPE	Homo sapiens
1948	177191	Histamine H3 Receptor	Q9Y5N1	476	QSFTQRFRLSRDRKVA	Homo sapiens
1949	177191	Histamine H3 Receptor	Q9Y5N1	477	RYGVGEAAVGAEGEATLG	Homo sapiens
1950	177191	Histamine H3 Receptor	Q9Y5N1	1477	SSRGTERPSLRGSKPSAS	Homo sapiens
1951	177191	Histamine H3 Receptor	Q9Y5N1	1479	KPSASSASLEKRMKMS	Homo sapiens
1952	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2052	RTLFSFYFRDTPRANR	Homo sapiens
1953	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2053	RPMSRGLLAVRGAFV	Homo sapiens
1954	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2059	CAVLSHRRRAQPWALLV	Homo sapiens
1955	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2733	RVLVSDSLFVICALSL	Homo sapiens

1956	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1014	KRKTNVLSPTSGSIS	Homo sapiens
1957	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1015	CFSQENPERRPSRIPST	Homo sapiens
1958	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1016	SYKDEDMYGTMKKMIC	Homo sapiens
1959	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1017	VERHMSIMRMVRVHSN	Homo sapiens
1960	189873	G Protein-Coupled Receptor GPR78	LR37	443	CQRMDVTVMKALALLAD	Homo sapiens
1961	189873	G Protein-Coupled Receptor GPR78	LR37	528	CSLRLPPEPERPRFAAFAT	Homo sapiens
1962	189873	G Protein-Coupled Receptor GPR78	LR37	533	RGPLPPGICAHSAQGALRR	Homo sapiens
1963	189873	G Protein-Coupled Receptor GPR78	LR37	534	CRQAQARDLGAPWAVGLRSL	Homo sapiens
1964	189874	Neuromedin U Receptor 2	LR28	420	QQKLEDPFQKHLNSTEE	Homo sapiens
1965	189874	Neuromedin U Receptor 2	LR28	422	KKDKSLEADEGNANIQRPC	Homo sapiens
1966	189874	Neuromedin U Receptor 2	LR28	423	SQHDPPQLPPAQRNIFLTC	Homo sapiens
1967	189874	Neuromedin U Receptor 2	LR28	487	ILHPFRAKLQSTRIRALR	Homo sapiens
1968	189884	G Protein-Coupled Receptor Ls189884	LR27	415	CKKRGTKTQNLNRNQIRSK	Homo sapiens
1969	189884	G Protein-Coupled Receptor Ls189884	LR27	418	EKPSSPSSGKGKTEKAE	Homo sapiens
1970	189884	G Protein-Coupled Receptor Ls189884	LR27	419	PSVQDNDPIPWEHEDQETGE	Homo sapiens
1971	189884	G Protein-Coupled Receptor Ls189884	LR27	486	KKPPTVSESQETPAGNSEG	Homo sapiens
1972	189884	G Protein-Coupled Receptor Ls189884	LR27	1832	LVMSEEFREGKGVWK	Homo sapiens
1973	189884	G Protein-Coupled Receptor Ls189884	LR27	1833	GLPDKVPSPESPAIPEK	Homo sapiens
1974	189884	G Protein-Coupled Receptor Ls189884	LR27	1834	PDVEQFWHERDTVPSVQ	Homo sapiens
1975	189884	G Protein-Coupled Receptor Ls189884	LR27	1835	RHHEGVEMCLVDVPAVAEE	Homo sapiens
1976	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1685	RVPQTGPSTASGVPE	Homo sapiens
1977	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1686	ETPRQIRSESLSSRSTMVTS	Homo sapiens

1978	189895	Receptor GPR61 G Protein-Coupled	AAK12637.1	1687	SSGAPQTTPHRTFGGK	Homo sapiens
1979	189895	Receptor GPR61 G Protein-Coupled	AAK12637.1	1688	KPAPEEELRLPSREGSIEE	Homo sapiens
1980	189895	Receptor GPR61 G Protein-Coupled	AAK12637.1	1689	CPSESWSRPLPSPKQE	Homo sapiens
1981	189900	Receptor GPR61 Sphingolipid Receptor Edg8	LR1	312	TGKLRGARYQPGAGLRAD	Homo sapiens
1982	189900	Sphingolipid Receptor Edg8	LR1	316	ALERSLTIMARRGPAPVSS	Homo sapiens
1983	189900	Sphingolipid Receptor Edg8	LR1	317	DGSFSGSERSSPQRDGLD	Homo sapiens
1984	189900	Sphingolipid Receptor Edg8	LR1	318	CGRDPGSGQQSASAAEASG	Homo sapiens
1985	189901	Sphingolipid Receptor Edg8 G Protein-Coupled	LR1	2266	ASRKAEAI GKLVQGEVS	Homo sapiens
		Receptor Ls189901 (HEOAD54)	ENSP000000071589			
1986	189901	G Protein-Coupled Receptor Ls189901	ENSP000000071589	2270	SCLSYRVGTKPSASLR	Homo sapiens
1987	189901	(HEOAD54) G Protein-Coupled	ENSP000000071589	2271	RVDYLLHETWRFGAAAC	Homo sapiens
1988	189901	Receptor Ls189901 (HEOAD54)	ENSP000000071589	2272	HQSRALLGLTRGRQGPVSD	Homo sapiens
1989	189901	G Protein-Coupled Receptor Ls189901	ENSP000000071589	2273	CIHTRPWTSNTVFLVSL	Homo sapiens
1990	189901	(HEOAD54) G Protein-Coupled	ENSP000000071589	2274	RGRQGPVSD ESSYQPSR	Homo sapiens
1991	189904	Receptor Ls189901 (HEOAD54)	ENSP000000071589	2108	IDRYLIKYPFREHLLQKKE	Homo sapiens
1992	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2109	TDNGTTCNDFASSGDPN	Homo sapiens
1993	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2110	FLKQRNRQVATALPLE	Homo sapiens
1994	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2111	RNVRIASRLGSWKQYQC	Homo sapiens
1995	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2112	GDHFRDMLMNQLRHNFKS	Homo sapiens

1996	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1721	CVAFLAVGNPDLQIPSR	Homo sapiens
1997	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1722	NLRLHNAIRHSYPEGIC	Homo sapiens
1998	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1723	QASKLGMLSLQRPQMISD	Homo sapiens
1999	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1724	DMMPKSEKFLPQLPGHTKRR	Homo sapiens
2000	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1715	QNLKDPVQIKIKHIRTQE	Homo sapiens
2001	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1716	KNKSGGWNTSGCVAHRD	Homo sapiens
2002	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1717	RNNNEVYGKESYGKEKGDE	Homo sapiens
2003	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1718	CGRNGKRSNRTLREEVLR	Homo sapiens
2004	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1719	TSKSKSSSTTYFKRNSHTD	Homo sapiens
2005	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1720	DKSLKLAHADGDQTS	Homo sapiens
2006	190026	G Protein-Coupled Receptor JEG18	LR24	407	LFPLLRISDDTPGNRTKC	Homo sapiens
2007	190026	G Protein-Coupled Receptor JEG18	LR24	408	QDKYPMAGQDLGEKQKALK	Homo sapiens
2008	190026	G Protein-Coupled Receptor JEG18	LR24	409	SFPLDFLVKSNEIKSC	Homo sapiens
2009	190026	G Protein-Coupled Receptor JEG18	LR24	410	RRRLSRQDLHDSIQLHAK	Homo sapiens
2010	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1725	KGEAKLDSRAKDVLTITQE	Homo sapiens
2011	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1727	DHKEQPIVTENAERQLVVKD	Homo sapiens
2012	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1728	EDFEEQLTLUFLDGERERK	Homo sapiens
2013	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1729	EGKEGDYIRIPERLLDVQD	Homo sapiens



2014	190168	Receptor VLGRI G Protein-Coupled Receptor GPR58	AAF27278.1	324	SEAYADGIEGYDILVACSSS	Homo sapiens
2015	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	326	NNLRNQNNGVKKDKKAAK	Homo sapiens
2016	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	379	DPFLNFSTPVVLFDAIT	Homo sapiens
2017	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	380	GKIFSSCFHNTILCMQKE	Homo sapiens
2018	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	327	CPKFVNKILSSHQPLFS	Homo sapiens
2019	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	328	KQHARVISHVPENTKGAVKK	Homo sapiens
2020	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	329	ENTKGAVKKHLSKKKDRKA	Homo sapiens
2021	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	330	CKFHTSFDMMMLRLTSI	Homo sapiens
2022	190188	G Protein-Coupled Receptor LGR6	LR36	439	ENHDQDLDLQLEMEDSKP	Homo sapiens
2023	190188	G Protein-Coupled Receptor LGR6	LR36	440	NPHFRDDLRLRPRAGDS	Homo sapiens
2024	190188	G Protein-Coupled Receptor LGR6	LR36	442	EDLHLDDEESSKRPLGLLAR	Homo sapiens
2025	190188	G Protein-Coupled Receptor LGR6	LR36	621	DSGPLAYAAAGELEKSSC	Homo sapiens
2026	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1836	CAARRQHALLYNVKRHSLE	Homo sapiens
2027	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1837	DGSLKAKEGSTGTSSESV	Homo sapiens
2028	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1838	CSIDLGEDGMEFGEDDIN	Homo sapiens
2029	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1839	SEDDVEAVNIPELPPS	Homo sapiens
2030	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1840	MHKTIKKEIQDMILKFFC	Homo sapiens
2031	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1841	KEDSHIPDLPGTEGGTEG	Homo sapiens
2032	190418	Inflammation-Related G Protein-Coupled Receptor	LR8	343	RQVKRAAQALDQYKLRQAS	Homo sapiens

2033	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	344	RTDEAMPGRFQELDSRLASG	Homo sapiens
2034	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	345	DSSEVGDAQINSKRAKQMAEK	Homo sapiens
2035	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	346	KAQPIKGARRAPDSSSEFGK	Homo sapiens
2036	190419	EX33 G Protein-Coupled Receptor Ls190419	CAC33085.1	2716	RRKSNFRLRGYSTGKT	Homo sapiens
2037	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2717	RRQKSSVNYLLALAAAD	Homo sapiens
2038	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2719	CFLTIPYVWWPNIWT	Homo sapiens
2039	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2725	CSIFFILNSIIVYKLR	Homo sapiens
2040	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2754	GRUYSLLSFISIPH	Homo sapiens
2041	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2755	FFLFLWIHVVDRE	Homo sapiens
2042	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2756	MDPTISTLDTLTIP	Homo sapiens
2043	190427	CysteinyI Leukotriene CYSLT2 Receptor	LR49	471	ASSIMLLDSGSEQNGSVTSC	Homo sapiens
2044	190427	CysteinyI Leukotriene CYSLT2 Receptor	LR49	472	RVLLKVEVPESGLRVSHRK	Homo sapiens
2045	190427	CysteinyI Leukotriene CYSLT2 Receptor	LR49	473	KDRLKSALRKGHPQKATKTC	Homo sapiens
2046	190427	CysteinyI Leukotriene CYSLT2 Receptor	LR49	512	MEPNGTFSNNNSRNC	Homo sapiens
2047	190427	CysteinyI Leukotriene CYSLT2 Receptor	NP_065110.1	2253	CTIENFKREFFPIVYLIIF	Homo sapiens
2048	190427	CysteinyI Leukotriene CYSLT2 Receptor	NP_065110.1	2254	GVLGNGLSIYVFLQPYK	Homo sapiens
2049	190427	CysteinyI Leukotriene CYSLT2 Receptor	NP_065110.1	2255	ADYYLRGSNWIFGDLC	Homo sapiens
2050	190427	CysteinyI Leukotriene CYSLT2 Receptor	NP_065110.1	2256	FRLHVTIRSASWILC	Homo sapiens

2051	190427	Receptor Cysteinyl Leukotriene	CYSLT2 NP_065110.1	2257	CGIWLIMASSIMLLDSGS	Homo sapiens
2052	190427	Receptor Cysteinyl Leukotriene	CYSLT2 NP_065110.1	2258	CLELNLYKIAKLQTMNYIAL	Homo sapiens
2053	190427	Receptor Cysteinyl Leukotriene	CYSLT2 NP_065110.1	2260	VSHRKALTTIITLIIFLC	Homo sapiens
2054	190427	Receptor Cysteinyl Leukotriene	CYSLT2 NP_065110.1	2261	CFLPYHTLRTVHLTWKVGGL	Homo sapiens
2055	190427	Receptor Cysteinyl Leukotriene	CYSLT2 NP_065110.1	2262	CKDRJHKALVITLALA	Homo sapiens
2056	190427	Receptor Cysteinyl Leukotriene	CYSLT2 NP_065110.1	2263	YFAGENFKDRLKSALRKG	Homo sapiens
2057	190427	Receptor Cysteinyl Leukotriene	CYSLT2 NP_065110.1	2264	HPQKAKTKCVFPVSVWLKKE	Homo sapiens
2058	190437	Receptor G Protein-Coupled	LR31	429	DSVSYEYGDYSDLSDRPVDC	Homo sapiens
2059	190437	Receptor C5L2 G Protein-Coupled	LR31	430	RESQGQDESVDKKSTSHD	Homo sapiens
2060	190437	Receptor C5L2 G Protein-Coupled	LR31	431	PSAIYRRLHQEHFARLQC	Homo sapiens
2061	190437	Receptor C5L2 G Protein-Coupled	LR31	432	CHWALRESQGQDESVDKKKS	Homo sapiens
2062	190437	Receptor C5L2 G Protein-Coupled	NP_060955.1	2818	MGNDVSVSYEYGDYSDLSDRPVDC	Homo sapiens
2063	190438	Receptor C5L2 G Protein-Coupled	ENSP00000080322	2585	TERLKIRWHTSDNQVRPQAC	Homo sapiens
2064	190484	Receptor Ls190438 G Protein-Coupled	LR33	434	EADLGATGHRPRTELDDED	Homo sapiens
2065	190484	Receptor Ls190484 G Protein-Coupled	LR33	435	RTCHRQQQPAAACRGFARVAR	Homo sapiens
2066	190484	Receptor Ls190484 G Protein-Coupled	LR33	436	EERPGSFTPEPTQTQLDSEG	Homo sapiens
2067	190484	Receptor Ls190484 G Protein-Coupled	LR33	437	RSDPTAGPQLNPNTAQPSD	Homo sapiens
2068	190595	Receptor Ls190484 G Protein-Coupled	NP_057418.1	1730	RNVTDITDILALERRLLQ	Homo sapiens
2069	190595	Receptor SH120 G Protein-Coupled	NP_057418.1	1731	KKKRMAMARRIMFQKGE	Homo sapiens
		Receptor SH120				

2070	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1732	KSVTSASGSENLTUQQE	Homo sapiens
2071	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1733	EVDALEELSRQLFLETAD	Homo sapiens
2072	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1734	DRVGKTDVPTRGIEIT	Homo sapiens
2073	190599	G Protein-Coupled Receptor GPRC5B	O75205	411	VRLPFIKEKEKSPVGLH	Homo sapiens
2074	190599	G Protein-Coupled Receptor GPRC5B	O75205	412	DEHNAALRTAGFPNGSLGKR	Homo sapiens
2075	190599	G Protein-Coupled Receptor GPRC5B	O75205	413	GKRPSGLGKRPSAPFRSNV	Homo sapiens
2076	190599	G Protein-Coupled Receptor GPRC5B	O75205	414	SQPRMRETAFEEDVQLPR	Homo sapiens
2077	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	542	GDPAYQSLKAQNAYSRLHC	Homo sapiens
2078	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	543	PFSSSHSYTVRSKKIFLSKL	Homo sapiens
2079	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	619	GKILLNLTGMRRKNITCQN	Homo sapiens
2080	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	620	EEVTVLQAIRITSYMN	Homo sapiens
2081	190623	Melanopsin	AAF24978.1	2137	CKNGESLWQRQLQSE	Homo sapiens
2082	190623	Melanopsin	AAF24978.1	2138	RHSRPYPSTHST	Homo sapiens
2083	190623	Melanopsin	AAF24978.1	2139	TSHTSNLSWISIRRRQE	Homo sapiens
2084	190623	Melanopsin	AAF24978.1	2140	DLEAKAPRPQGHEAET	Homo sapiens
2085	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1735	KLQRRPVAVDVLLNLIASD	Homo sapiens
2086	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1736	KTRPRLGQAGLVSVAC	Homo sapiens
2087	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1737	EFSGDISHSQGTNGTC	Homo sapiens
2088	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1738	SRLVWILGRGSHRRQRR	Homo sapiens
2089	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1739	GQWQQESSMELKEQKGG	Homo sapiens
2090	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1740	EEQRADRPAAERTSEHSQGC	Homo sapiens
2091	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	2569	MDTGPDQSYFSGNHWFVFSV	Homo sapiens

2092	190701	Receptor GPR41 & GPR42 C-C Chemokine Receptor	AAF61299.1	1441	VAIYAYKKQRTKTDV	Homo sapiens
2093	190701	11 C-C Chemokine Receptor	AAF61299.1	1442	VAVTKVPSQSGVGKPCWII	Homo sapiens
2094	190701	11 C-C Chemokine Receptor	AAF61299.1	1443	CNMSKRMDIAIQVTESI	Homo sapiens
2095	190701	11 C-C Chemokine Receptor	AAF61299.1	1444	RQSVEEFPDSEGPTPE	Homo sapiens
2096	190705	11 G Protein-Coupled Receptor SALPR	NP_057652.1	1741	GHPPGSGGAESADTEARVR	Homo sapiens
2097	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1742	HSVASALKSHIRTRGHGRGDC	Homo sapiens
2098	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1743	KGGAAVAGRPRTGASARR	Homo sapiens
2099	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1744	CLVRRFRKALKSLLWR	Homo sapiens
2100	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1745	RPFTATTKPEHEDQGLQ	Homo sapiens
2101	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	339	AFPPVLDVGTYSFIREEDQC	Homo sapiens
2102	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	340	HDRRKMKPVQFVAASQN	Homo sapiens
2103	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	341	RRRLLVDEFKMEKRISR	Homo sapiens
2104	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	342	LRRCFSTLLYCRRSLPRE	Homo sapiens
2105	190725	G Protein-Coupled Receptor GPR26	LR26	554	PLTLAGVARRQPAGDRLC	Homo sapiens
2106	190725	G Protein-Coupled Receptor GPR26	LR26	555	CSRRPDERLRFVFTGA	Homo sapiens
2107	190725	G Protein-Coupled Receptor GPR26	LR26	557	CKEILNRLLRHSIHSSG	Homo sapiens
2108	190725	G Protein-Coupled Receptor GPR26	LR26	567	CLEEQKRRRQRATKKIST	Homo sapiens
2109	190741	Sreb3 Receptor GPR26	LR9	516	EPEEVSGALSPPSASAYVK	Homo sapiens
2110	190741	Sreb3	LR9	519	NGHAASRRLLGMDEVKGEK	Homo sapiens
2111	190741	Sreb3	LR9	526	KKCLRTHAPCWGTGGAPAPR	Homo sapiens
2112	190741	Sreb3	LR9	527	VLMAATHAVYGKLLFEYR	Homo sapiens

2113	190742	G Protein-Coupled Receptor H7TBA62	LR23	550	RRAPGPSDTFVFNALAD	Homo sapiens
2114	190742	G Protein-Coupled Receptor H7TBA62	LR23	551	QRRQRRRQDSRVVARSVR	Homo sapiens
2115	190742	G Protein-Coupled Receptor H7TBA62	LR23	552	RREPRQALAGTFRDLRSR	Homo sapiens
2116	190742	G Protein-Coupled Receptor H7TBA62	LR23	553	KQVGRRWVASNPRESRPS	Homo sapiens
2117	190743	G Protein-Coupled Receptor H7TBA62	LR32	568	KDCIESTGDYFLLCDAEGP	Homo sapiens
2118	190743	G Protein-Coupled Receptor GPRC5D	LR32	569	VENQELSRGTFLGDSGSR	Homo sapiens
2119	190743	G Protein-Coupled Receptor GPRC5D	LR32	570	GDSGSREVLQEKQEKNIHA	Homo sapiens
2120	190743	G Protein-Coupled Receptor GPRC5D	LR32	571	SMLLRGNPQFQRQPQWDDP	Homo sapiens
2121	190744	G Protein-Coupled Receptor GPRC5D	LR34	529	KVPSEELTSSSHGPPPTAR	Homo sapiens
2122	190744	G Protein-Coupled Receptor GPRC5C	LR34	532	RSGGEGGPQGNSSAGWAV	Homo sapiens
2123	190744	G Protein-Coupled Receptor GPRC5C	LR34	535	QDTKKRSLLGTVQVFLGT	Homo sapiens
2124	190744	G Protein-Coupled Receptor GPRC5C	LR34	538	KEQKGQSMFVENKAFSMD	Homo sapiens
2125	190745	G Protein-Coupled Receptor LGR7	LR40	560	TATEIRNQVKKEMILAKR	Homo sapiens
2126	190745	G Protein-Coupled Receptor LGR7	LR40	561	NYRQRKSMDSKGQKTYAPS	Homo sapiens
2127	190745	G Protein-Coupled Receptor LGR7	LR40	565	SCSNLTVLVMRKKNKINHLN	Homo sapiens
2128	190745	G Protein-Coupled Receptor LGR7	LR40	566	DELDGSKNIENLPPLIFKD	Homo sapiens
2129	190748	GPCR Ls190748	LR47	546	QLSSPSRPTQKTLCSLR	Homo sapiens
2130	190748	GPCR Ls190748	LR47	547	DMILKIASMHSSQIRKMEHAG	Homo sapiens
2131	190748	GPCR Ls190748	LR47	548	AGGYRSPRTPSDFKALRTVS	Homo sapiens
2132	190748	GPCR Ls190748	LR47	549	RESSCHIVTISSEFDG	Homo sapiens
2133	190748	GPCR Ls190748	LR47	1481	GVKKVLTSLFLLSARNC	Homo sapiens
2134	190748	GPCR Ls190748	LR47	1482	NSLLNPLIYAYWQKEVRLQ	Homo sapiens
2135	190749	G Protein-Coupled	LR48	467	RRAALRPPRPARGSLRSD	Homo sapiens

2136	190749	Receptor GPR62	LR48	468	RPVRLALGRLRRALPGPVR	Homo sapiens
2137	190749	G Protein-Coupled Receptor GPR62	LR48	510	DSRLSILPLRPLPGGK	Homo sapiens
2138	190749	G Protein-Coupled Receptor GPR62	LR48	511	RPPEGPAVGPSEAPEQTPE	Homo sapiens
2139	190749	G Protein-Coupled Receptor GPR62	LR48	2702	VVARRAALRPPRPA	Homo sapiens
2140	190749	G Protein-Coupled Receptor GPR62	LR48	2703	PSEAPEQTPELAGGR	Homo sapiens
2141	190749	G Protein-Coupled Receptor GPR62	LR48	2704	GPSEAPEQTPELAG	Homo sapiens
2142	190774	Receptor GPR62	NP_067637.2	2235	PDTNSTINLSLSTRVTLAFF	Homo sapiens
2143	190774	Histamine H4 Receptor	NP_067637.2	2237	VVDKNLRHRSSVFFLN	Homo sapiens
2144	190774	Histamine H4 Receptor	NP_067637.2	2240	LYPHTLFEWDFGKEIC	Homo sapiens
2145	190774	Histamine H4 Receptor	NP_067637.2	2242	TQHTGVLKIVTLMVAV	Homo sapiens
2146	190774	Histamine H4 Receptor	NP_067637.2	2243	VNGPMILVSESWKDEGSEC	Homo sapiens
2147	190774	Histamine H4 Receptor	NP_067637.2	2244	CEPGFFSEWYILAITSL	Homo sapiens
2148	190774	Histamine H4 Receptor	NP_067637.2	2245	AYFNMINIYWSLWKRDLHSRC	Homo sapiens
2149	190774	Histamine H4 Receptor	NP_067637.2	2246	CGHSFRGRLSSRRSL	Homo sapiens
2150	190774	Histamine H4 Receptor	NP_067637.2	2247	IASKMGFSQSDSVLHQIRE	Homo sapiens
2151	190774	Histamine H4 Receptor	NP_067637.2	2249	IVLSFYSSATGPKSWWYRIA	Homo sapiens
2152	190823	Histamine H4 Receptor	NP_067637.2	2085	IIRVTVPGKTGTAC	Homo sapiens
2153	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2086	SPWTNDPKERINVAVA	Homo sapiens
2154	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2087	RIRELLQGMVKEIGIAVD	Homo sapiens
2155	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2088	TQTSDTATNSTLPSAE	Homo sapiens
2156	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	481	TEVPDQAQTSNTHITSAS	Homo sapiens
2157	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	522	GDTAVERLNVFITMAKV	Homo sapiens
2158	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	523	MSLAKRVMITGLWIFTI	Homo sapiens
2159	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	525	LHFIGFTVPMISITV	Homo sapiens

2160	190948	like 2 (FPRL2)	NP_038475.1	1658	DELLEAPGDLETLRLQQHC	Homo sapiens
2161	190948	EMR2 Hormone Receptor	NP_038475.1	1659	CVASHLLDGLIEDVLRGLSKN	Homo sapiens
2162	190948	EMR2 Hormone Receptor	NP_038475.1	1660	KSGDPGPSVAVGLVSPG	Homo sapiens
2163	190948	EMR2 Hormone Receptor	NP_038475.1	1661	SKGIRKLKTESEMHTLSS	Homo sapiens
2164	190948	EMR2 Hormone Receptor	NP_038475.1	1662	ELSLEVQKQVDRSVTLRQNG	Homo sapiens
2165	190948	EMR2 Hormone Receptor	NP_038475.1	1663	EPEKQMLLHETHQGLLDGS	Homo sapiens
2166	190955	Leukotriene B4 Receptor	NP_000743.1	1492	KRMQKRSVTALMVNLALAD	Homo sapiens
2167	190955	Leukotriene B4 Receptor	NP_000743.1	1493	RPFVSQKLRTKAMARR	Homo sapiens
2168	190955	Leukotriene B4 Receptor	NP_000743.1	1494	ASYSDIGRRRLQARRFR	Homo sapiens
2169	190955	Leukotriene B4 Receptor	NP_000743.1	1495	LEGTGSEASSTRRGGG	Homo sapiens
2170	191039	Trace Amine Receptor 1	LR122	2039	RKALKMMLFGKIFQKDSRC	Homo sapiens
2171	191039	Trace Amine Receptor 1	LR122	2040	QIGLEMKNGISQSKERKAV	Homo sapiens
2172	191039	Trace Amine Receptor 1	LR122	2041	RIVLIAKEGARLISDANQK	Homo sapiens
2173	191039	Trace Amine Receptor 1	LR122	2042	ELNFKGAEEIYKHHVHC	Homo sapiens
2174	191039	Trace Amine Receptor 1	LR122	2043	CVKNINWSNDVRASLYS	Homo sapiens
2175	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1569	SAEPPADWDGAGGSYRLRG	Homo sapiens
2176	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1571	GIVRRVRVSVKRVSVLN	Homo sapiens
2177	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1572	RNEEFRRSVRSVLPGVGDA	Homo sapiens
2178	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1573	CEEEESWAGRRIPVSLLYSG	Homo sapiens
2179	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1651	CYLGIIVRRVRVSVKRVSV	Homo sapiens
2180	191168	Receptor 88 (GPR88)	NP_073625.1	1544	KELYRSVVRTRGVGVKVP	Homo sapiens
2181	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1545	ILTNRQPRDKNVKKCS	Homo sapiens



2182	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1546	CPNSATLSQDNRRKKEQDGG	Homo sapiens
2183	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1570	TTRPFKTSNPKNLLGAK	Homo sapiens
2184	191193	Trace Amine Receptor 3 (TA3)	LR88	1969	ANEEGIEELVVA	Homo sapiens
2185	191193	Trace Amine Receptor 3 (TA3)	LR88	2316	RKIESTASQAGSS	Homo sapiens
2186	191193	Trace Amine Receptor 3 (TA3)	LR88	2571	LVDAVIDAYMINFI	Homo sapiens
2187	191193	Trace Amine Receptor 3 (TA3)	LR88	2573	RTDSSITNLFSEEVET	Homo sapiens
2188	191196	G Protein-Coupled Receptor GPR80	IP_13092	1864	NASDFPDYAAAFGNCTDE	Homo sapiens
2189	191196	G Protein-Coupled Receptor GPR80	IP_13092	1865	TLFUTSTNRTNRSACLD	Homo sapiens
2190	191196	G Protein-Coupled Receptor GPR80	IP_13092	1866	TLTHGLQTDSCCLKQKARR	Homo sapiens
2191	191196	G Protein-Coupled Receptor GPR80	IP_13092	1867	RLLSICSIENQIHEA	Homo sapiens
2192	191196	G Protein-Coupled Receptor GPR80	IP_13092	1868	QQAVCSTVRCKVSGNLE	Homo sapiens
2193	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2749	QDIAEVDHSEGCF	Homo sapiens
2194	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2750	RKQWRLQGPILKLA	Homo sapiens
2195	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2751	CSISINFPSFFTVMTC	Homo sapiens
2196	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2752	QWFLILWWKDSDV	Homo sapiens
2197	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2575	AFLSDNTIEVRINRTLKK	Homo sapiens
2198	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2576	QETKNEFRNLKQIQSKC	Homo sapiens
2199	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2577	CNNKTHWAPVRSTM	Homo sapiens
2200	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2581	TKMAEYDLQNDVFIIPD	Homo sapiens
2201	193511	EGF-Like Module-Containing	AAK15076.1	1665	CQDTSSTKTEGRKELQKIV	Homo sapiens

2202	193511	Mucin-Like Receptor EMR3 EGF-Like Module-Containing	AAK15076.1	1666	RDVESKVLLETALKDPEQK	Homo sapiens
2203	193511	Mucin-Like Receptor EMR3 EGF-Like Module-Containing	AAK15076.1	1667	KIQNDSVAIETQAITDNC	Homo sapiens
2204	193511	Mucin-Like Receptor EMR3 EGF-Like Module-Containing	AAK15076.1	1668	CSEERKTFNLNVQMNSMDIR	Homo sapiens
2205	193511	Mucin-Like Receptor EMR3 EGF-Like Module-Containing	AAK15076.1	1669	EEMDKKDQWVWLNQVVSAA	Homo sapiens
2206	193511	Mucin-Like Receptor EMR3 EGF-Like Module-Containing	AAK15076.1	1670	SKSVTLTFQHVKMTPTSK	Homo sapiens
2207	193516	Mucin-Like Receptor EMR3 G Protein-Coupled	CAC21687.1	2142	CILLPTAVIVFSYVKIAK	Homo sapiens
2208	193516	Receptor dJ402H5.1 G Protein-Coupled	CAC21687.1	2144	RPDSPIQLSVVPTLLA	Homo sapiens
2209	193516	Receptor dJ402H5.1 G Protein-Coupled	CAC21687.1	2145	CQTGGLKATKKKSLEG	Homo sapiens
2210	193516	Receptor dJ402H5.1 G Protein-Coupled	CAC21687.1	2146	RLHTVTVTRKSSAVLE	Homo sapiens
2211	193516	Receptor dJ402H5.1 G Protein-Coupled	CAC21687.1	2620	PTAVIVFSYVKIAKV	Homo sapiens
2212	193524	Receptor dJ402H5.1 Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1947	KLAQRLREVTGHTDHYFSQD	Homo sapiens
2213	193524	Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1948	CALQTWGSERRRLGLDTSKD	Homo sapiens
2214	193524	Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2734	RGRRQSAARNRSGPPEQPNE	Homo sapiens
2215	193524	Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2735	RNSRGPPEQPNEELG	Homo sapiens
2216	193524	Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2736	AQVREDVRPHTVWLR	Homo sapiens
2217	193524	Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2742	QLDQVPSRHPSPRE	Homo sapiens

2218	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2744	LDSLSRSSNSREQLDQV	Homo sapiens
2219	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1903	REEHFHVMVDARNRSPLYSC	Homo sapiens
2220	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1904	PGPAPGGEEAADPRASRR	Homo sapiens
2221	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1905	CPRPSGSHKEAYSERPGGLL	Homo sapiens
2222	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1906	PSSGAPRPGRILPUNGRA	Homo sapiens
2223	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2018	FLGKNDIDIKTKKELIVN	Homo sapiens
2224	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2019	QVTYRDSKEKRDRLNFKL	Homo sapiens
2225	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2020	CERTKIWGTFKINERFTND	Homo sapiens
2226	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2021	SKYANGIEIQLKKAYER	Homo sapiens
2227	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2022	CIVVFVIRTERSLHAP	Homo sapiens
2228	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2023	KILALFWFDSREISFEAC	Homo sapiens
2229	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2024	CVHQDVMKLAYADTLP	Homo sapiens
2230	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2027	RFGNSLHPIVRVVMGD	Homo sapiens
2231	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2028	KTKQIRTRVLAMFKISC	Homo sapiens
2232	194743	FLJ14454	LR77	1855	KTDENEQDQASASVDMVFSP	Homo sapiens
2233	194743	FLJ14454	LR77	1856	KKDYQYPKSLDILSNVGC	Homo sapiens
2234	194743	FLJ14454	LR77	1857	KNLQTSDDGINNIDFDNN	Homo sapiens
2235	194743	FLJ14454	LR77	1858	SQNGNNPQWELDYRQEKIC	Homo sapiens
2236	194743	FLJ14454	LR77	1859	RPRLRVKMYNFLRSLPTLHE	Homo sapiens
2237	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1845	CNPSVPKQRVMKLTKM	Homo sapiens
2238	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1846	RLTRWRTRYKTIRINLG	Homo sapiens
2239	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1847	KDGVESCAFDLTSPDDVL	Homo sapiens
2240	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1848	LSGNFQKRLPQIGRRATE	Homo sapiens

2241	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1849	TIIRSRKKTVPDIYIC	Homo sapiens
2242	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1907	RRATEKEINNMGNTLKSHF	Homo sapiens
2243	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2089	CRIEGDTISQVMPPLIIVA	Homo sapiens
2244	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2090	RRHWAFGDIPCRVGLFTL	Homo sapiens
2245	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2091	CESFIMESANGWHDIM	Homo sapiens
2246	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2092	CSFKIVWSLRRRQQLARQAR	Homo sapiens
2247	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2093	RRRQQLARQARMKKATR	Homo sapiens
2248	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2094	TVSSACDPSVHGALH	Homo sapiens
2249	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2095	CSLKPQPGHSKTQRPEEM	Homo sapiens
2250	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2096	CISVANFSQSQSDGQWD	Homo sapiens
2251	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2034	RTRKQHSEATNSSNRVFWC	Homo sapiens
2252	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2035	RVISQISADNYKIHGDPSA	Homo sapiens
2253	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2036	TSSARTSNAKPFHSD	Homo sapiens
2254	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2037	NGTRPGMASTKLSPWD	Homo sapiens
2255	194858	G Protein-Coupled Receptor Ls194858	LR84	1933	LGIAWDRRLRSPAGC	Homo sapiens
2256	194858	G Protein-Coupled Receptor Ls194858	LR84	1934	GERYMAVLRPLQPPGS	Homo sapiens
2257	194858	G Protein-Coupled Receptor Ls194858	LR84	1935	CRDEPSALARALTWRQAR	Homo sapiens
2258	194858	G Protein-Coupled Receptor Ls194858	LR84	1936	AAQRCLQGLWGRASRD	Homo sapiens
2259	194858	G Protein-Coupled Receptor Ls194858	LR84	1937	RDSPGPSIAYHPSSQSSVD	Homo sapiens
2260	194878	MrgX3 G Protein-Coupled	AAK91806.1	2748	ALFSRIHLDWKVLF	Homo sapiens

2261	194903	Receptor G Protein-Coupled Receptor GPCR83	ENSP00000198236	1991	CIAFKDIMPFSAQVGD	Homo sapiens
2262	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1992	KAFEEAYARADKKAPRC	Homo sapiens
2263	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1993	ETKIQWHGKDNQVPSVC	Homo sapiens
2264	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1994	CSYLGKDLPENVNEAK	Homo sapiens
2265	194904	Receptor GPCR83 WO0034334-hFB41A	LR114	2011	SDYDMPLEDEDEVNTS	Homo sapiens
2266	194904	Receptor GPCR83 WO0034334-hFB41A	LR114	2014	NPHGAHATSPFNFSY	Homo sapiens
2267	194905	G Protein-Coupled Receptor MGC7035	LR112	1986	ERALPRTYMASVYNTRHVC	Homo sapiens
2268	194905	G Protein-Coupled Receptor MGC7035	LR112	1987	CAKMQNAEAAADATLVF	Homo sapiens
2269	194905	G Protein-Coupled Receptor MGC7035	LR112	1988	DRDTGRLEPSAHRLLVATVC	Homo sapiens
2270	194905	G Protein-Coupled Receptor MGC7035	LR112	1989	RYMNQSFPSKLQRLMKKLPC	Homo sapiens
2271	194907	G Protein-Coupled Receptor MGC7035	LR116	2003	CARAAGDAPLRSLEQANRTR	Homo sapiens
2272	194907	Receptor 14273 G Protein-Coupled	LR116	2004	VISYSKILQTTKASRKRL	Homo sapiens
2273	194907	Receptor 14273 G Protein-Coupled	LR116	2005	TVSLAYSRSRSHQIRVSQQD	Homo sapiens
2274	194907	Receptor 14273 G Protein-Coupled	LR116	2006	CTWFPEKGAILDTSVKRND	Homo sapiens
2275	194908	Receptor 14273 G Protein-coupled Receptor	LR117	2007	TYGRDNGQLLGERVARRDIC	Homo sapiens
2276	194908	Gpcrb4 G Protein-coupled Receptor	LR117	2008	QETLPTLQPNQNMTEERQR	Homo sapiens
2277	194908	Gpcrb4 G Protein-coupled Receptor	LR117	2009	RTSQSYTCNQECNCLNAT	Homo sapiens
2278	194908	Gpcrb4 G Protein-coupled Receptor	LR117	2010	RPQSHPRIDPDDPKITIVSC	Homo sapiens
2279	194957	Gpcrb4 Trace Amine Receptor 4 (TA4)	AAK71243.1	2312	VARRQAKKIENTGSKT	Homo sapiens
2280	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2313	KVIVTGQVLKNSSA	Homo sapiens

2281	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2318	MSSNSSLLVAVQLC	Homo sapiens
2282	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2307	IAKQQAIKIETTSSKV	Homo sapiens
2283	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2314	MTSNFSQPWWQLC	Homo sapiens
2284	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2319	KLILSGDVLKAS	Homo sapiens
2285	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2570	SGDVLKASSTISLFLE	Homo sapiens
2286	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2727	QDKPEVDKGGGQLPEESL	Homo sapiens
2287	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2728	LINISHLRKILVS	Homo sapiens
2288	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2729	MDPTVPVFGTKL	Homo sapiens
2289	195015	G Protein-Coupled Receptor GPR82	AAL26482	2706	RYATLMQKDSQETT	Homo sapiens
2290	195015	G Protein-Coupled Receptor GPR82	AAL26482	2707	KIFYGHLLKKFRQPNF	Homo sapiens
2291	195015	G Protein-Coupled Receptor GPR82	AAL26482	2708	YSVIEATEGEESLC	Homo sapiens
2292	195015	G Protein-Coupled Receptor GPR82	AAL26482	2715	CTSIMKEDLTYSVVKR	Homo sapiens

SEQ ID NO:	LS_ID	Gene	Antibody Company Name
1	127	5-HT1A Receptor	Chemicon
1	127	5-HT1A Receptor	Research Diagnostics
1	127	5-HT1A Receptor	Santa Cruz
3	128	5-HT1B Receptor	Chemicon
3	128	5-HT1B Receptor	Research Diagnostics
3	128	5-HT1B Receptor	Santa Cruz
5	129	5-HT1D Receptor	Research Diagnostics
5	129	5-HT1D Receptor	Santa Cruz
11	132	5-HT2A Receptor	Calbiochem
11	132	5-HT2A Receptor	Research Diagnostics
13	133	5-HT2B Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Santa Cruz
21	139	5-HT7 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Alpha Diagnostic Int.
23	272	Adenosine A1 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Santa Cruz
25	273	Adenosine A2a Receptor	Alpha Diagnostic Int.
25	273	Adenosine A2a Receptor	Calbiochem
25	273	Adenosine A2a Receptor	Chemicon
25	273	Adenosine A2a Receptor	Santa Cruz
27	274	Adenosine A2b Receptor	Alpha Diagnostic Int.
27	274	Adenosine A2b Receptor	Chemicon
27	274	Adenosine A2b Receptor	Santa Cruz
29	275	Adenosine A3 Receptor	Alpha Diagnostic Int.
29	275	Adenosine A3 Receptor	Santa Cruz
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Alpha Diagnostic Int.
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Chemicon
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Research Diagnostics
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Santa Cruz
35	377	Alpha 1b-adrenoceptor	Research Diagnostics
35	377	Alpha 1b-adrenoceptor	Santa Cruz
37	379	Alpha 1c-adrenoceptor	Research Diagnostics
37	379	Alpha 1c-adrenoceptor	Santa Cruz
39	387	Alpha 2a-adrenoceptor	Calbiochem
39	387	Alpha 2a-adrenoceptor	Santa Cruz
41	388	Alpha 2b-adrenoceptor	Research Diagnostics
41	388	Alpha 2b-adrenoceptor	Santa Cruz
43	389	Alpha 2c-adrenoceptor	Research Diagnostics
43	389	Alpha 2c-adrenoceptor	Santa Cruz
45	599	Bradykinin B1 Receptor	Research Diagnostics
49	635	Beta-1 adrenoceptor	Calbiochem
49	635	Beta-1 adrenoceptor	Research Diagnostics

49	635	Beta-1 adrenoceptor	Santa Cruz
51	640	Beta-2 adrenoceptor	Research Diagnostics
51	640	Beta-2 adrenoceptor	Santa Cruz
53	643	Beta-3 adrenoceptor	Alpha Diagnostic Int.
53	643	Beta-3 adrenoceptor	Chemicon
53	643	Beta-3 adrenoceptor	Research Diagnostics
53	643	Beta-3 adrenoceptor	Santa Cruz
57	692	Bombesin Receptor Subtype-3	Alpha Diagnostic Int.
57	692	Bombesin Receptor Subtype-3	Chemicon
59	729	CXC Chemokine Receptor 5	Research Diagnostics
59	729	CXC Chemokine Receptor 5	Santa Cruz
61	735	C-C Chemokine Receptor 1	Calbiochem
61	735	C-C Chemokine Receptor 1	Capralogics
61	735	C-C Chemokine Receptor 1	Chemicon
61	735	C-C Chemokine Receptor 1	Research Diagnostics
61	735	C-C Chemokine Receptor 1	Santa Cruz
63	737	C-C Chemokine Receptor 3	Research Diagnostics
63	737	C-C Chemokine Receptor 3	Santa Cruz
65	738	C-C Chemokine Receptor 4	Capralogics
65	738	C-C Chemokine Receptor 4	Research Diagnostics
65	738	C-C Chemokine Receptor 4	Santa Cruz
67	741	C-C Chemokine Receptor 7	Research Diagnostics
67	741	C-C Chemokine Receptor 7	Santa Cruz
69	742	C-C Chemokine Receptor 8	Chemicon
70	742	C-C Chemokine Receptor 8	Chemicon
71	742	C-C Chemokine Receptor 8	Chemicon
73	752	CXC Chemokine Receptor 3	Research Diagnostics
73	752	CXC Chemokine Receptor 3	Santa Cruz
73	752	CXC Chemokine Receptor 3	Zymed
75	753	CXC Chemokine Receptor 4	Biosource
75	753	CXC Chemokine Receptor 4	Calbiochem
75	753	CXC Chemokine Receptor 4	Capralogics
75	753	CXC Chemokine Receptor 4	Chemicon
75	753	CXC Chemokine Receptor 4	eBioscience
75	753	CXC Chemokine Receptor 4	Research Diagnostics
75	753	CXC Chemokine Receptor 4	Santa Cruz
77	755	Complement Component 3a Receptor 1	Chemokine.com
79	758	Complement Component 5a Receptor 1	Santa Cruz
83	832	Cannabinoid Receptor 1	Alpha Diagnostic Int.
83	832	Cannabinoid Receptor 1	Biosource
83	832	Cannabinoid Receptor 1	Calbiochem
83	832	Cannabinoid Receptor 1	Cayman
83	832	Cannabinoid Receptor 1	Chemicon
83	832	Cannabinoid Receptor 1	Santa Cruz
85	833	Cannabinoid Receptor 2	Alpha Diagnostic Int.
85	833	Cannabinoid Receptor 2	Calbiochem
85	833	Cannabinoid Receptor 2	Cayman
85	833	Cannabinoid Receptor 2	Chemicon
85	833	Cannabinoid Receptor 2	Santa Cruz
97	1240	Dopamine Receptor D1	Alpha Diagnostic Int.
97	1240	Dopamine Receptor D1	Biogenesis



97	1240	Dopamine Receptor D1	Calbiochem
97	1240	Dopamine Receptor D1	Chemicon
97	1240	Dopamine Receptor D1	FabGennix through Abcam
97	1240	Dopamine Receptor D1	Research Diagnostics
97	1240	Dopamine Receptor D1	Santa Cruz
99	1241	Dopamine Receptor D5	Alpha Diagnostic Int.
99	1241	Dopamine Receptor D5	Biogenesis
99	1241	Dopamine Receptor D5	Calbiochem
99	1241	Dopamine Receptor D5	Chemicon
99	1241	Dopamine Receptor D5	Santa Cruz
101	1242	Dopamine Receptor D2	Alpha Diagnostic Int.
101	1242	Dopamine Receptor D2	Biogenesis
101	1242	Dopamine Receptor D2	Calbiochem
101	1242	Dopamine Receptor D2	Chemicon
101	1242	Dopamine Receptor D2	DPC Biermann/Acris
101	1242	Dopamine Receptor D2	FabGennix through Abcam
101	1242	Dopamine Receptor D2	Research Diagnostics
101	1242	Dopamine Receptor D2	Santa Cruz
103	1243	Dopamine Receptor D3	Alpha Diagnostic Int.
103	1243	Dopamine Receptor D3	Biogenesis
103	1243	Dopamine Receptor D3	Calbiochem
103	1243	Dopamine Receptor D3	Chemicon
103	1243	Dopamine Receptor D3	Research Diagnostics
103	1243	Dopamine Receptor D3	Santa Cruz
103	1243	Dopamine Receptor D3	Zymed
105	1244	Dopamine Receptor D4	Alpha Diagnostic Int.
105	1244	Dopamine Receptor D4	Biogenesis
105	1244	Dopamine Receptor D4	Calbiochem
105	1244	Dopamine Receptor D4	Chemicon
105	1244	Dopamine Receptor D4	DPC Biermann/Acris
105	1244	Dopamine Receptor D4	Santa Cruz
107	1267	Opioid Receptor, delta 1 (OPRD1)	Biosource
107	1267	Opioid Receptor, delta 1 (OPRD1)	Calbiochem
107	1267	Opioid Receptor, delta 1 (OPRD1)	DPC Biermann/Acris
107	1267	Opioid Receptor, delta 1 (OPRD1)	Santa Cruz
113	1486	Endothelin B Receptor	Biogenesis
113	1486	Endothelin B Receptor	Capralogics
113	1486	Endothelin B Receptor	DPC Biermann/Acris
113	1486	Endothelin B Receptor	Fitzgerald Industries Int.
113	1486	Endothelin B Receptor	Research Diagnostics
115	1488	Endothelin A Receptor	Biogenesis
115	1488	Endothelin A Receptor	Capralogics
115	1488	Endothelin A Receptor	DPC Biermann/Acris
115	1488	Endothelin A Receptor	Fitzgerald Industries Int.
115	1488	Endothelin A Receptor	Research Diagnostics
117	1598	Calcium-Sensing Receptor (CASR)	Chemicon
117	1598	Calcium-Sensing Receptor (CASR)	DPC Biermann/Acris

121	1681	Follicle Stimulating Hormone Receptor	Biogenesis
121	1681	Follicle Stimulating Hormone Receptor	DPC Biermann/Acris
121	1681	Follicle Stimulating Hormone Receptor	Santa Cruz
125	1762	Galanin Receptor GalR1	Alpha Diagnostic Int.
135	1925	Gonadotropin-Releasing Hormone Receptor	Biocarta
135	1925	Gonadotropin-Releasing Hormone Receptor	Lab Vision Corporation/NeoMarkers
135	1925	Gonadotropin-Releasing Hormone Receptor	Research Diagnostics
135	1925	Gonadotropin-Releasing Hormone Receptor	Santa Cruz
139	1951	Growth Hormone Secretagogue Receptor	Santa Cruz
143	2120	Histamine H1 Receptor	Alpha Diagnostic Int.
143	2120	Histamine H1 Receptor	Chemicon
145	2121	Histamine H2 Receptor	Alpha Diagnostic Int.
145	2121	Histamine H2 Receptor	Chemicon
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Biosource
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Calbiochem
147	2783	Opioid Receptor, kappa 1 (OPRK1)	DPC Biermann/Acris
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Santa Cruz
151	2976	Lysophosphatidic Acid Receptor Edg2	Exalpha Biologicals
155	3057	Melanocortin 3 Receptor (MC3R)	Alpha Diagnostic Int.
155	3057	Melanocortin 3 Receptor (MC3R)	Chemicon
155	3057	Melanocortin 3 Receptor (MC3R)	Research Diagnostics
155	3057	Melanocortin 3 Receptor (MC3R)	Santa Cruz
157	3058	Melanocortin 4 Receptor (MC4R)	Alpha Diagnostic Int.
157	3058	Melanocortin 4 Receptor (MC4R)	Chemicon
157	3058	Melanocortin 4 Receptor (MC4R)	Research Diagnostics
157	3058	Melanocortin 4 Receptor (MC4R)	Santa Cruz
159	3059	Melanocortin 5 Receptor (MC5R)	Alpha Diagnostic Int.
159	3059	Melanocortin 5 Receptor (MC5R)	Chemicon
159	3059	Melanocortin 5 Receptor (MC5R)	Research Diagnostics

159	3059	Melanocortin 5 Receptor (MC5R)	Santa Cruz
161	3061	Melanocortin 1 Receptor (MC1R)	Alpha Diagnostic Int.
161	3061	Melanocortin 1 Receptor (MC1R)	Chemicon
161	3061	Melanocortin 1 Receptor (MC1R)	Research Diagnostics
161	3061	Melanocortin 1 Receptor (MC1R)	Santa Cruz
169	3093	Metabotropic Glutamate Receptor 1	Chemicon
171	3094	Metabotropic Glutamate Receptor 2	Chemicon
173	3095	Metabotropic Glutamate Receptor 3	Chemicon
175	3096	Metabotropic Glutamate Receptor 4	Zymed
177	3097	Metabotropic Glutamate Receptor 5	Chemicon
183	3100	Metabotropic Glutamate Receptor 8	Chemicon
185	3212	Opioid mu-type Receptor	Biosource
185	3212	Opioid mu-type Receptor	Calbiochem
185	3212	Opioid mu-type Receptor	Chemicon
185	3212	Opioid mu-type Receptor	DPC Biermann/Acris
185	3212	Opioid mu-type Receptor	Santa Cruz
187	3223	Muscarinic acetylcholine Receptor M1	Biogenesis
187	3223	Muscarinic acetylcholine Receptor M1	Calbiochem
187	3223	Muscarinic acetylcholine Receptor M1	Chemicon
187	3223	Muscarinic acetylcholine Receptor M1	Santa Cruz
189	3224	Muscarinic acetylcholine Receptor M2	Biogenesis
189	3224	Muscarinic acetylcholine Receptor M2	Calbiochem
189	3224	Muscarinic acetylcholine Receptor M2	Chemicon
189	3224	Muscarinic acetylcholine Receptor M2	Santa Cruz
191	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
192	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
191	3226	Muscarinic acetylcholine Receptor M4	Chemicon
192	3226	Muscarinic acetylcholine Receptor M4	Chemicon
191	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz

192	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz
194	3227	Muscarinic Acetylcholine Receptor M5	Biogenesis
194	3227	Muscarinic Acetylcholine Receptor M5	Santa Cruz
200	3404	Neuropeptide Y Receptor Type 2	Biogenesis
202	3405	Neuropeptide Y Receptor Type 4	Biogenesis
206	3408	Neurotensin Receptor Type 1	Santa Cruz
208	3452	Opiate Receptor-Like 1 (OPRL1)	Santa Cruz
214	3582	Oxytocin Receptor	Santa Cruz
216	3589	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	Chemicon
216	3589	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	Zymed
218	3595	Purinergic Receptor P2Y1	Chemicon
218	3595	Purinergic Receptor P2Y1	Zymed
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Biocarta
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Lab Vision Corporation/NeoMarkers
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Santa Cruz
236	3846	Sphingolipid Receptor Edg1	Exalpa Biologicals
238	3847	Sphingolipid Receptor Edg3	Exalpa Biologicals
240	3848	C-C Chemokine Receptor 9	Research Diagnostics
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemicon
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemokine.com
248	3852	CX3C Chemokine Fractalkine Receptor 1	eBioscience
250	3853	G Protein-Coupled Receptor GPR15	Santa Cruz
264	3860	G Protein-Coupled Receptor SLC/MCH1	Alpha Diagnostic Int.
264	3860	G Protein-Coupled Receptor SLC/MCH1	Santa Cruz
295	3927	Prostaglandin E Receptor EP4	Cayman
299	4051	Proteinase-Activated Receptor 2	Research Diagnostics
299	4051	Proteinase-Activated Receptor 2	Santa Cruz
301	4052	Proteinase-Activated Receptor 3	Research Diagnostics
301	4052	Proteinase-Activated Receptor 3	Santa Cruz
305	4254	Rhodopsin	Biocarta
305	4254	Rhodopsin	DPC Biermann/Acris
311	4480	Somatostatin Receptor Type 1	Santa Cruz

446/448

313	4481	Somatostatin Receptor Type 2	Biogenesis
313	4481	Somatostatin Receptor Type 2	Santa Cruz
315	4482	Somatostatin Receptor Type 3	Santa Cruz
317	4483	Somatostatin Receptor Type 4	Santa Cruz
319	4484	Somatostatin Receptor Type 5	Santa Cruz
321	4552	Tachykinin Receptor 1	Santa Cruz
323	4687	Thrombin Receptor	DPC Biermann/Acris
323	4687	Thrombin Receptor	Research Diagnostics
323	4687	Thrombin Receptor	Santa Cruz
325	4734	Thyrotropin Releasing Hormone Receptor	Santa Cruz
327	4944	Angiotensin II Type 1 Receptor	Alpha Diagnostic Int.
327	4944	Angiotensin II Type 1 Receptor	Biocarta
327	4944	Angiotensin II Type 1 Receptor	Biogenesis
327	4944	Angiotensin II Type 1 Receptor	Capralogics
327	4944	Angiotensin II Type 1 Receptor	Chemicon
327	4944	Angiotensin II Type 1 Receptor	DPC Biermann/Acris
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Lab Vision Corporation/NeoMarkers
327	4944	Angiotensin II Type 1 Receptor	Santa Cruz
329	4946	Angiotensin II Type 2 Receptor	Alpha Diagnostic Int.
329	4946	Angiotensin II Type 2 Receptor	DPC Biermann/Acris
329	4946	Angiotensin II Type 2 Receptor	Santa Cruz
331	5072	Pyrimidinergic Receptor P2Y4	Chemicon
333	5117	Vasopressin V1A Receptor	Chemicon
335	5118	Vasopressin V1B Receptor	Alpha Diagnostic Int.
335	5118	Vasopressin V1B Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Alpha Diagnostic Int.
337	5119	Vasopressin V2 Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Research Diagnostics
347	6031	SIV/HIV Receptor BONZO	Santa Cruz
349	6204	Lysophosphatidic Acid Receptor Edg4	Exalpa Biologicals
351	6213	C-C Chemokine Receptor 5	Calbiochem
351	6213	C-C Chemokine Receptor 5	Capralogics
351	6213	C-C Chemokine Receptor 5	Chemicon
351	6213	C-C Chemokine Receptor 5	Research Diagnostics
351	6213	C-C Chemokine Receptor 5	Santa Cruz
361	6853	Purinergic Receptor P2Y11	Zymed

365	7221	Galanin Receptor GalR2	Alpha Diagnostic Int.
367	7246	Orexin Receptor 1	Alpha Diagnostic Int.
369	7247	Orexin Receptor 2	Alpha Diagnostic Int.
371	8436	Platelet-Activating Factor Receptor	Cayman
371	8436	Platelet-Activating Factor Receptor	Santa Cruz
377	9421	Neuropeptide Y Receptor Type 1	Biogenesis
377	9421	Neuropeptide Y Receptor Type 1	DPC Biermann/Acris
379	9834	Corticotropin releasing factor Receptor 1	Research Diagnostics
379	9834	Corticotropin releasing factor Receptor 1	Santa Cruz
385	14198	Interleukin-8 Receptor B	Biosource
385	14198	Interleukin-8 Receptor B	R&D Systems
385	14198	Interleukin-8 Receptor B	Research Diagnostics
385	14198	Interleukin-8 Receptor B	Santa Cruz
387	14641	Calcitonin Receptor	Santa Cruz
389	16041	C-C Chemokine Receptor 6	Research Diagnostics
389	16041	C-C Chemokine Receptor 6	Santa Cruz
391	16599	Smoothened	Research Diagnostics
391	16599	Smoothened	Santa Cruz
397	17535	Gaba(b) Receptor 1	Alpha Diagnostic Int.
397	17535	Gaba(b) Receptor 1	Calbiochem
397	17535	Gaba(b) Receptor 1	Chemicon
397	17535	Gaba(b) Receptor 1	Santa Cruz
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	Santa Cruz
435	54053	Gaba(b) Receptor 2	Alpha Diagnostic Int.
435	54053	Gaba(b) Receptor 2	Chemicon
439	56923	Muscarinic acetylcholine Receptor M3	Biogenesis
439	56923	Muscarinic acetylcholine Receptor M3	Santa Cruz
457	152201	Thyrotropin Receptor	DPC Biermann/Acris
457	152201	Thyrotropin Receptor	Santa Cruz
459	152245	C-C Chemokine Receptor 2	Research Diagnostics
459	152245	C-C Chemokine Receptor 2	Santa Cruz
461	152299	Interleukin-8 Receptor A	Biosource
462	152299	Interleukin-8 Receptor A	Biosource
461	152299	Interleukin-8 Receptor A	R&D Systems
462	152299	Interleukin-8 Receptor A	R&D Systems
461	152299	Interleukin-8 Receptor A	Research Diagnostics
462	152299	Interleukin-8 Receptor A	Research Diagnostics
461	152299	Interleukin-8 Receptor A	Santa Cruz
462	152299	Interleukin-8 Receptor A	Santa Cruz
468	159973	Vasoactive Intestinal Polypeptide Receptor 1	Exalpha Biologicals
470	160040	Vasoactive Intestinal Polypeptide Receptor 2	Exalpha Biologicals
472	160055	Motilin Receptor (GPR38)	Santa Cruz

503	160228	T-Cell Death-Associated Gene 8 (GPR65)	Santa Cruz
507	160312	Sphingolipid Receptor Edg5	Exalpha Biologicals
515	160329	Proteinase-Activated Receptor 4	Santa Cruz
535	161214	Galanin Receptor GalR3	Alpha Diagnostic Int.
537	161221	Urotensin-II Receptor (GPR14)	Santa Cruz
546	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Cayman
548	177191	Histamine H3 Receptor	Alpha Diagnostic Int.
548	177191	Histamine H3 Receptor	Chemicon
552	180956	Lysophosphatidic Acid Receptor Edg7	Exalpha Biologicals
562	189900	Sphingolipid Receptor Edg8	Exalpha Biologicals
628	190774	Histamine H4 Receptor	Alpha Diagnostic Int.
628	190774	Histamine H4 Receptor	Chemicon
636	190955	Leukotriene B4 Receptor BLT1	Cayman

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

WO 02/061087 A3



## INTERNATIONAL SEARCH REPORT

International Application No

PC 17US 01/50107

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/705 C07K16/28 G01N33/53

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EMBL, SEQUENCE SEARCH, EPO-Internal, WPI Data, BIOSIS, MEDLINE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>ZHOU FENG C ET AL: "Production and characterization of an anti-serotonin 1A receptor antibody which detects functional 5-HT1A binding sites."</p> <p>MOLECULAR BRAIN RESEARCH, vol. 69, no. 2, 8 June 1999 (1999-06-08), pages 186-201, XP002222431 ISSN: 0169-328X figure 1; table 1</p> <p style="text-align: center;">--- -/--</p>	1-10, 15-26

☒ Further documents are listed in the continuation of box C.☐ Patent family members are listed in annex.

## \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&amp;" document member of the same patent family

Date of the actual completion of the international search

6 January 2003

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/50107

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>RAYMOND JOHN R ET AL:            "Immunohistochemical mapping of cellular and subcellular distribution of 5-HT-1A receptors in rat and human kidneys."            AMERICAN JOURNAL OF PHYSIOLOGY,            vol. 264, no. 1 PART 2, 1993, pages F9-F19, XP001127496            ISSN: 0002-9513            the whole document, in particular figures 1, 3</p>	1-10, 15-26
Y	<p>---            VERDOT L ET AL: "PRODUCTION OF ANTI-PEPTIDE ANTIBODIES DIRECTED AGAINST THE FIRST AND THE SECOND EXTRACELLULAR LOOP OF THE HUMAN SEROTONIN 5-HT1A RECEPTOR"            BIOCHIMIE, MASSON, PARIS, FR,            vol. 76, no. 1, 1994, pages 165-170, XP008009332            ISSN: 0300-9084            the whole document</p>	1-10, 15-26
Y	<p>---            TODD E ANTHONY AND EFRAIAN C AZMITIA:            "Molecular characterization of antipeptide antibodies against the 5-HT1A receptor: Evidence for state-dependent antibody binding."            MOLECULAR BRAIN RESEARCH,            vol. 50, no. 1-2,            15 October 1997 (1997-10-15), pages 277-284, XP002222432            ISSN: 0169-328X            the whole document</p>	1-10, 15-26
A	<p>---            ECKARD C P ET AL: "CHARACTERISATION OF G-PROTEIN-COUPLED RECEPTORS BY ANTIBODIES"            CURRENT MEDICINAL CHEMISTRY, BENTHAM SCIENCE PUBLISHERS BV, BE,            vol. 7, no. 9, September 2000 (2000-09), pages 897-910, XP000984970            ISSN: 0929-8673            the whole document</p>	1-10, 15-26
A	<p>---            BACKSTROM JON R ET AL: "Generation of anti-peptide antibodies against serotonin 5-HT2A and 5-HT2C receptors."            JOURNAL OF NEUROSCIENCE METHODS,            vol. 77, no. 1,            7 November 1997 (1997-11-07), pages 109-117, XP002222433            ISSN: 0165-0270            the whole document</p>	1-10, 15-26
	<p>---            -/--</p>	

## INTERNATIONAL SEARCH REPORT

Inte

al Application No

PCT/US 01/50107

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EASON MARGARET G ET AL: "Identification of a G-s coupling domain in the amino terminus of the third intracellular loop of the alpha-2A-adrenergic receptor: Evidence for distinct structural determinants that confer G-s versus G-i coupling." JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 270, no. 42, 1995, pages 24753-24760, XP002222434 ISSN: 0021-9258 the whole document -----</p>	1-10, 15-26

# INTERNATIONAL SEARCH REPORT

national application No.  
PCT/US 01/50107

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 19 and 20 are directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-10, 15-26 (all partially)

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 1-10, 15-26, all partially

an isolated antigenic peptide having the amino acid sequence  
SEQ ID NO: 692, nucleic acids encoding said peptide,  
antibodies directed against said peptide, kits containing  
said antibodies

Inventions 2 to 1600: claims 1-26,  
all partially and in so far as applicable

each separate, individual invention relates to an isolated  
antigenic peptide, nucleic acids encoding said peptide,  
antibodies directed against said peptide, kits containing  
said antibodies,  
wherein invention 2 is represented by the peptide having the  
amino acid sequence SEQ ID NO: 693,  
invention 3 is represented by the peptide having the amino  
acid sequence SEQ ID NO: 694,  
continuing to invention 1600, which is represented by the  
peptide having the amino acid sequence SEQ ID NO: 2292

Invention 1601: claims 27-66

a method of identifying an amino acid sequence of an  
antigenic peptide derived from a candidate polypeptide,  
peptides identified by that method, antibodies directed  
against said peptides